CALIFORNIA HORSE RACING BOARD
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MEDICATION, SAFETY AND WELFARE COMMITTEE MEETING

of the **California Horse Racing Board** will be held on Wednesday, **April 18, 2018**, commencing at **11:00 a.m.,** in the **Baldwin Terrace Room** at the **Santa Anita Park Race Track, 285 West Huntington Drive, Arcadia,** California. Non-committee Board members attending the committee meeting may not participate in the public discussion, official committee vote, or committee closed session.

AGENDA

Action Items:

1. Discussion regarding a presentation on **bisphosphonates in race horses.**

2. Report and discussion on **special testing projects.**

3. Discussion and action regarding the **proposed addition of CHRB Rule 1503.5, Continuing Education for Trainers and Assistant Trainers,** to require continuing education as a condition of renewal of license for Trainer or Assistant Trainer.

4. Discussion and action regarding the **proposed amendment to CHRB Rule 1843.2, Classification of Drug Substances,** to update the CHRB Classification of Foreign Substances listing.

5. Discussion and action regarding the **proposed addition of CHRB Rule 1660.1, Delivery of Medical Records,** to require the transfer of medical records of horses claimed in a claiming race.

6. Report and update on **Association of Racing Commissioners International (ARCI), Racing Medication and Testing Consortium (RMTC) and the International Conference of Racing Analysts and Veterinarians (ICRAV).**

7. **General Business:** Communications, reports, requests for future actions of the Committee.

Item 1

STAFF ANALYSIS
REPORT AND DISCUSSION ON PRESENTATION OF BISPHOSPHONATES IN RACE HORSES

Medication, Safety and Welfare Committee Meeting
April 18, 2018

BACKGROUND

Business and Professions Code section 19580 provides that the Board shall adopt regulations to establish policies, guidelines, and penalties relating to equine medication in order to preserve and enhance the integrity of horse racing in the state. Business and Professions Code section 19581 states no substance of any kind shall be administered by any means to a horse after it has been entered to race in a horse race, unless the Board has, by regulation, specifically authorized the use of the substance and the quantity and composition thereof. Board Rule 1843, Medication, Drugs and Other Substances, provides that no horse participating in a race shall carry in its body any drug substance or its metabolites or analogues, foreign to the horse except as hereinafter expressly provided. No drug substance shall be administered to a horse which is entered to compete in a race to be run in this state except for approved and authorized drug substances as provided in these rules.

Bone injury and repair occur naturally in racing horses. The bone tissue undergoes constant remolding especially in young developing horses. Osteoblasts create new bone, osteocytes maintain existing bone and osteoclasts remove damaged bone. Bisphosphonates are a group of drug that inhibit osteoclasts from removing bone thereby slowing bone loss. The result is a denser bone but not a healthier, stronger bone. Prolonged use can have a negative effect on young developing horses who are treated with Bisphosphonates for bone injuries. Due to the perceived risks, the British Horseracing Authority (BHA) has enacted rules that prohibit horses under the age of three and a half years old from racing when they have been treated with Bisphosphonates. BHA also requires a 30 day moratorium from racing for any horse treated with Bisphosphonates.

RECOMMENDATION

This item is presented for Committee discussion. Dr. Susan Stover is prepared to make a presentation to the Committee regarding Bisphosphonate in race horses.

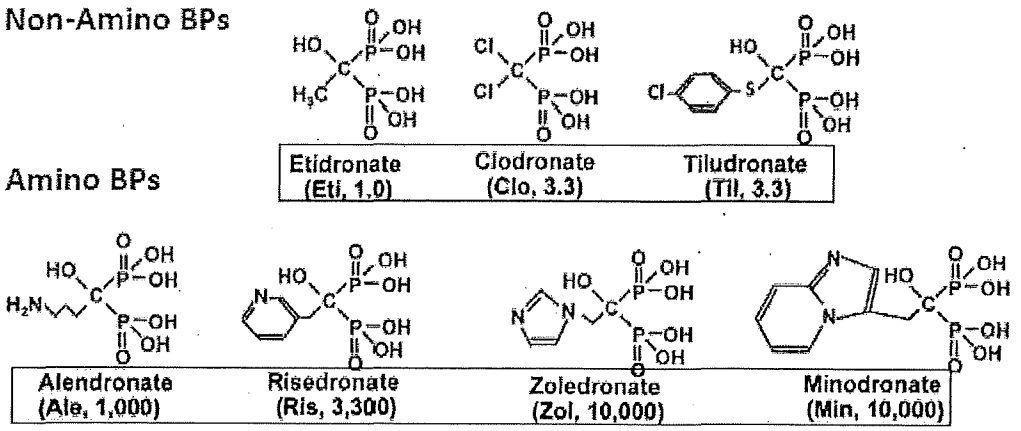
Bisphosphonate Overview

Rick M. Arthur, DVM, Equine Medical Director

Bisphosphonates are a group of drugs that inhibits osteoclast-mediated bone resorption by interfering with intracellular pathways required for osteoclast cell function, essentially killing osteoclasts. Bone tissue undergoes constant remodeling, especially in young developing horses. This process is kept in balance by osteoblasts creating bone, osteocytes maintaining bone and osteoclasts removing damaged bone. Bisphosphonates inhibit the digestion of bone by encouraging osteoclasts to undergo cell death, thereby slowing bone loss. While bisphosphonates killing osteoclasts may be beneficial in in some populations, such as post-menopausal women, normal bone function is critical to maintaining healthy bone in young equine athletes.

Two first generation bisphosphonates have been approved in the US to treat horses older than 4YO with navicular disease, Tildren® & Osphos®. The FDA information on Tildren® & Osphos® is included. Newer generation of nitrogenous bisphosphonates are much more potent than the older bisphosphonates. They are currently too expensive to be routinely used in horses but that will change once patents expire.

- Amino group have much greater affinity for hydroxyapatite
  ➔ more potentent inhibitors of bone resorption



Since 2015, the British Horse Racing Authority (BHA) has restricted the use of bisphosphonates to horses over 3 years and six months. The BHA regulation and advisory is attached. More recently the International Federation Horseracing Authority (IFHA) has reviewed the use of bisphosphonates from both an animal welfare perspective and an anti-doping perspective. The former is related to their effects on normal bone remodeling in young athletes; the latter is for their direct analgesic effects with bone pain. The analgesic effects of bisphosphonates on bone pain in humans and laboratory animals are well documented. When adopted the IFHA international agreement will very likely look similar to the current BHA regulation.

Dr. Chris Riggs, Chief of Clinical Veterinary Services for the Hong Kong Jockey Club, gave a review at the 2018 ICRAV in Dubai on their experience with bisphosphonate use in Hong Kong. All veterinarians doing working on horses work for the Hong Kong Jockey Club. Procedures and prescribing policies are strictly controlled and the average age of their horse population is close to 4½ YO. There are no 2YO's and most horses don't come into Hong Kong before their 3YO year. In their controlled clinical environment, older horse population, and excellent clinical records, they have not recognized complications with bisphosphonates in a little over 100 cases over the last 5 years. I've attached a few slides from his presentation in Hong Kong in 2017

More recently, in the US, prominent equine surgeon Dr. Larry Bramlage, expressed his concern on overuse of bisphosphonates in his clinical experience. His case load would include young horses without restricted use protocols as seen in Hong Kong. Dr. Bramlage's recent interview discussing his clinical experience related to bisphosphonates is attached.

FDA Provides Equine Veterinarians with Important Information about TILDREN and OSPHOS for Navicular Syndrome in Horses

In the first half of 2014, FDA approved two new equine drugs—TILDREN distributed by Ceva Sante Animale and OSPHOS distributed by Dechra, Ltd.—intended to control the clinical signs of navicular syndrome, a common cause of forelimb lameness in horses. Below is a brief reference guide for equine veterinarians on both drugs.

What are the active ingredients in TILDREN and OSPHOS and how do they work?

The active ingredient in TILDREN is tiludronate disodium, and the active ingredient in OSPHOS is clodronate disodium. Both belong in the bisphosphonate drug class and the exact mechanism of action in horses with navicular syndrome is unknown.

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What are bisphosphonates?

Bisphosphonates are a class of drugs commonly prescribed to prevent bone loss in people. While TILDREN and OSPHOS are not used for this purpose in horses, knowing how bisphosphonates work in people will help you better understand this drug class overall and especially the adverse reactions seen in horses.

Bones undergo constant turnover, with osteoblasts forming bone and osteoclasts resorbing it. In normal bone tissue, there is a balance between bone formation and bone resorption. But in diseased bone tissue, this balance is disrupted. Bisphosphonates inhibit bone resorption by encouraging osteoclasts to undergo cell death, leading to a decrease in the breakdown of bone.

Bisphosphonates preferentially "stick" to calcium and bind to it. Because most of the body's calcium is stored in bones, these drugs accumulate to a high concentration only in bones. Bisphosphonates are incorporated into the bone matrix and are gradually released over months to years.

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What are the precautions for bisphosphonates?

As a class, bisphosphonates can cause gastrointestinal and renal toxicity. Higher blood plasma levels may increase the risk of toxicity. Because bisphosphonates are excreted by the kidneys, conditions that impair renal function may increase the blood plasma level and lead to more adverse reactions. It is not recommended to use bisphosphonates in horses with impaired renal function. Use caution if you give bisphosphonates along with other potentially nephrotoxic drugs, and be sure to monitor renal function.

Bisphosphonates can cause signs of colic in horses, including abdominal pain, discomfort, and agitation. These colic signs usually occur shortly after the drug is given and may be associated with altered intestinal motility.

Bisphosphonates affect the blood plasma levels of some minerals and electrolytes, such as calcium, magnesium and potassium. The effects are immediate and can last up to several hours. Use caution when you give bisphosphonates to horses with conditions affecting mineral or electrolyte homeostasis (for example, hyperkalemic periodic paralysis or hypocalcemia) or conditions which may be worsened by hypocalcemia (for example, cardiac disease).

The safe use of either TILDREN or OSPHOS has not been evaluated in horses less than 4 years of age. The effect of bisphosphonates on the skeleton of growing horses has not been studied. Because bisphosphonates inhibit osteoclast activity and decrease bone turnover, these drugs may affect bone growth.

The safe use of either TILDREN or OSPHOS has not been evaluated in breeding horses or pregnant or lactating mares. Bisphosphonates have been shown to cause abnormal fetal development in laboratory animals. The uptake of bisphosphonates into fetal bone may be greater than into maternal bone, creating a possible risk of skeletal or other abnormalities in the fetus. Bisphosphonates may be excreted in milk and absorbed by nursing animals.

Increased bone fragility has been seen in animals given bisphosphonates at high doses or for long periods of time. Because bisphosphonates inhibit bone resorption and decrease bone turnover, the body may be unable to repair microdamage within a bone.

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How do you administer TILDREN and OSPHOS?

TILDREN and OSPHOS are prescription animal drugs and federal law restricts them to use by or on the order of a licensed veterinarian. Although both drugs are in the same drug class, they have different routes of administration.

After reconstituting TILDREN with sterile 0.9% sodium chloride, you administer the drug by intravenous infusion into a jugular catheter **slowly** and **evenly** over 90 minutes to minimize the risk of adverse reactions. It may take two months to see the maximum effect.

You administer OSPHOS by intramuscular injection. The total volume should be divided equally into three injection sites. Similar to TILDREN, it may take two months to see the most clinical improvement.

For horses that initially respond to OSPHOS but don't maintain their clinical improvement for 6 months, you may re-administer the drug at 3- to 6-month intervals based on clinical signs. For horses that respond to OSPHOS and maintain their clinical improvement for 6 months, you should re-administer after clinical signs recur.

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What are the contraindications for TILDREN?

Do not give TILDREN to horses with a known hypersensitivity to the active ingredient, tiludronate disodium, or to mannitol. Also do not use the drug in horses with impaired renal function or with a history of renal disease. **Nonsteroidal anti-inflammatory drugs (NSAIDs) should not be used concurrently with TILDREN as this may increase the risk of renal toxicity and acute renal failure.** While no safe window for the concurrent use of NSAIDS and TILDREN has been determined, it may be especially risky to give an NSAID from 48 hours before to 48 hours after treatment with TILDREN. Make sure you observe appropriate wash-out periods between NSAID and TILDREN administration and monitor blood urea nitrogen and creatinine values.

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What are the contraindications for OSPHOS?

Do not give OSPHOS to horses with a known hypersensitivity to clodronate disodium.

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What adverse reactions are caused by TILDREN?

In three field studies, adverse reactions in horses treated with TILDREN most

commonly occurred during the 90-minute intravenous infusion or within four hours following the end of the infusion. The most common reaction was colic.

Expect about 30 to 45 percent of horses given TILDREN to show transient signs of colic. Hoses should be observed closely for four hours after treatment. Colic signs can last about 90 minutes and may be intermittent. In many cases, hand-walking may improve or resolve the colic signs. **If a horse needs medical therapy, you should give non-NSAID treatments, as the concurrent use of an NSAID increases the risk of renal toxicity and acute renal failure.**

In the field studies, adverse reactions occurring between four hours and one day after treatment included:

- Increased frequency of urination with or without increased drinking;
- Reduced appetite;
- Sore or stiff neck;
- Fever; and
- Colic - this was the most common adverse reaction.

When giving TILDREN, you should advise owners of the potential for adverse reactions in the hours or days following treatment. Also tell owners to consult you before giving their horse any NSAID after treatment with TILDREN.

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What adverse reactions are caused by OSPHOS?

In the effectiveness field study, adverse reactions in horses treated with OSPHOS usually began within two hours of treatment. The most common adverse reactions were discomfort, agitation, pawing, and signs of colic. In the safety study, several horses treated with OSPHOS developed soft or firm injection site swellings, which resolved within 10 days.

When giving OSPHOS, you should advise owners to watch their horse for at least two hours after treatment for agitation, signs of colic, and other abnormal behavior, such as head shaking and lip licking. If a horse seems uncomfortable or nervous or experiences cramping, tell the owner to hand-walk the horse for 15 minutes. Advise the owner to contact you if signs don't resolve or if the horse displays other abnormal symptoms.

Read the package inserts for TILDREN and OSPHOS for a complete description of the contraindications, warnings, and precautions for each drug.

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Should you report problems related to TILDREN or OSPHOS?

Yes. FDA encourages veterinarians to report all problems related to TILDREN or OSPHOS. Problems include adverse drug events and product defects. An adverse

drug event, also called an adverse drug experience, is an undesired side effect associated with a drug or a lack of effectiveness. Adverse drug events also include unfavorable reactions in people who handle the drug. Product defects are problems such as defective packaging or an abnormal appearance of the drug. Please see **How to Report Animal Drug Side Effects and Product Problems (/AnimalVeterinary/SafetyHealth/ReportaProblem/ucm055305.htm)**.

Ceva Sante Animale (for TILDREN) and Dechra, Ltd. (for OSPHOS) are required to submit to FDA all reports of adverse drug events and product defects that they receive. FDA reviews the reports to identify potential safety and effectiveness concerns that may not have been apparent at the time of drug approval. FDA conducts this post-marketing monitoring to make sure that TILDREN and OSPHOS continue to meet the required standards for safety and effectiveness established during the approval process.

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Important information for your client

The package insert for TILDREN has a section called "Information for Owners" and the package insert for OSPHOS has a similar section called "Information for Horse Owners." These sections may help you in your communication with clients regarding both drugs.

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What are the benefits of using an FDA-approved equine drug?

A main benefit of using an FDA-approved equine drug is that you know the drug is safe and effective in horses when used according to the label. A second benefit is that the label is written specifically for horses and includes all necessary information, including associated risks, so you can use the drug safely and effectively in your patients.

FDA rigorously evaluates an animal drug before approving it. As part of the approval process, the drug company must prove to FDA that:

- The drug is safe and effective for a specific use in a specific animal species;
- The manufacturing process is adequate to preserve the drug's identity, strength, quality, and purity. The company must show that the drug can be consistently produced from batch to batch; and
- The drug's labeling is truthful, complete, and not misleading.

FDA's role does not stop after the agency approves an animal drug. As long as the drug company markets the animal drug, the agency continues to monitor:

- The drug's safety and effectiveness. Sometimes, the agency's post-approval monitoring uncovers safety and effectiveness issues that were unknown at the time of approval;
- The manufacturing process to ensure quality and consistency are maintained from

batch to batch;

- The drug's labeling to make sure the information remains truthful, complete, and not misleading; and
- The company's marketing communications related to the drug to make sure the information is truthful and not misleading.

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For more information

If you have questions or want more information, please contact CVM's Education & Outreach Staff at 240-402-7002 or **AskCVM@fda.hhs.gov (mailto:AskCVM@fda.hhs.gov)**.

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References

- **Freedom of Information Summary, Original New Animal Drug Application, NADA 141-420, for TILDREN ()**. February 13, 2014.
- **Freedom of Information Summary, Original New Animal Drug Application, NADA 141-427, for OSPHOS ()**. April 28, 2014.

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More in Resources for You (/AnimalVeterinary/ResourcesforYou/default.htm)

For Industry (/AnimalVeterinary/ResourcesforYou/ucm508946.htm)

For Veterinarians (/AnimalVeterinary/ResourcesforYou/ucm214771.htm)

Publicaciones en Español del Centro de Medicina Veterinaria (CVM) (/AnimalVeterinary/ResourcesforYou/ucm135578.htm)

Animal Health Literacy (/AnimalVeterinary/ResourcesforYou/AnimalHealthLiteracy/default.htm)

BHA

NEW STAND-DOWN PERIOD: BISPHOSPHONATES

The British Horseracing Authority (BHA) would like to advise the Responsible Person (i.e. trainers, owners, breeders) and their veterinary surgeons of a new Rule requiring a mandatory 30 day Stand-Down period from racing following the administration of any bisphosphonate licensed for equine use. This Rule will be effective from 10 August 2017.

The Rule, an addition to Schedule (B)3 – Requirements for horse to run, will read as follows:

> *"11B The horse must not have been administered*
> *11.B.1any bisphosphonate under the age of three years and six months as determined by its recorded date of birth, or*
> *11.B.2 any bisphosphonate on the day of the race or on any of the 30 days before the day of the race in which the horse is declared to run".*

The BHA expectations with regard to the use of bisphosphonates in horses racing or intending to race in Great Britain in order to comply with the Rules of Racing

- The product used should be licensed for use in horses the UK;
- The horse must be over three years and six months of age at the time of administration as determined by its recorded date of birth;
- There must be a diagnosis determined by a veterinary surgeon that supports the use of a bisphosphonate as an appropriate treatment; and
- The bisphosphonate must be administered by a veterinary surgeon.

Due to their complex nature and action, the excretion of bisphosphonates may be unpredictable, leading to considerable variation in excretion times. This variability may be increased when bisphosphonates are administered to horses with on-going musculoskeletal disease process, including the possibility that bisphosphonates may be released from bone at a period remote from initial administration. As such, it cannot be guaranteed that future musculoskeletal disease processes will not result in an Adverse Analytical Finding.

As a guide, the BHA are aware of data from studies in **normal horses** which indicate that if a single dose of Tildren® (CEVA) at 1 mg/kg were administered intravenously, the Detection Time would be unlikely to exceed the Stand-Down period. A discussion between the Responsible Person and their veterinary surgeon is essential when considering administration of any medication which is a Prohibited Substance on raceday.

03 July 2017

THE USE OF BISPHOSPHONATES IN THE RACEHORSE

Christopher Riggs

Department of Veterinary Clinical Services
The Hong Kong Jockey Club

香港賽馬會
The Hong Kong Jockey Club

WHAT ARE BPS USED FOR IN RACEHORSES?

- Disease of subchondral bone of fetlock, carpus
- Osteo-arFcular pain in any locaFon
- Pain arising from the thoracolumbar and pelvic regions
- PrevenFon of stress fractures
- Treatment of stress fractures
- To improve the acFon of "poor movers"
- Treatment of general fetlock pain when all else fails
- To treat any condiFon affecFng Fssues starFng with "b", "c", "l", "m" or "t"!
- To get a lame horse to a race!!

POTENTIAL RISKS OF BPS IN RACEHORSES

- Inhibit the biological mechanism for bone maintenance/ repair è accumulaFon of microdamage è bone fragility
- Inhibit "turn-over" of bone matrix è excessive mineralisaFon è bone fragility
- Interfere with fracture healing è delayed union/ non union
- Damage arFcular carFlage è accelerate joint degeneraFon
- Potent analgesics è may disguise signs of underlying, serious injury
- Interfere with calcium homeostasis è may predispose to other disease (e.g. cardiac arrhythmias)
- Cause retenFon of calcified growth carFlage in skeletally immature animals è developmental orthopaedic disease

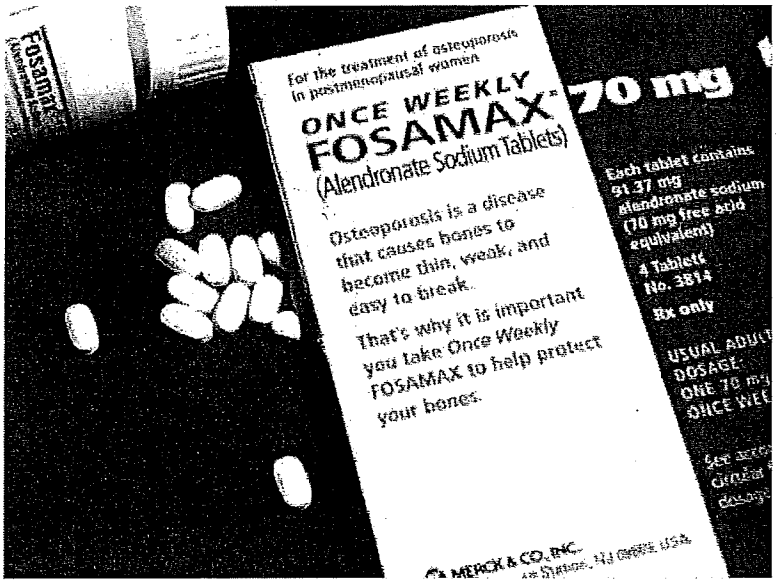
POTENTIAL RISKS OF BPS IN RACEHORSES

What can we learn from experimental work in other species and human clinical studies?

1. Do they lead to bone fragility?
2. Do they prevent fracture healing?
3. Are they effecFve in prevenFng stress fractures?
4. Do they have analgesic properFes?
5. Are they detrimental or beneficial in the treatment of osteoarthriFs?

Bramlage: 'Price To Pay' For Bisphosphonate Use Is Delayed Healing

by Natalie Voss | 03.01.2018 | 5:13pm



The human drug Fosamax is a bisphosphonate

"I wish we'd never seen these drugs," said renowned orthopedic surgeon Dr. Larry Bramlage at the conclusion of a recent presentation about bisphosphonates.

Four years after the Food and Drug Administration approved the use of Tildren and Osphos (both trade names for bisphosphonates) for use in adult horses suffering from navicular syndrome, Bramlage said he's seeing unintended side effects from people using the drug off label.

As Bramlage explained at a recent client education seminar held by Rood and Riddle Equine Hospital, there are three main types of cells associated with bone repair and growth: osteoblasts, which make new bone; osteoclasts, which break down damaged or inferior bone, and osteocytes, which direct the repair.

When a horse has a fracture, the crack is initially filled by the osteoblasts with a temporary boney substance called woven bone, which can be made very quickly but is not very strong. Over time, osteoclasts clear away woven bone, which is poorly organized and weak,

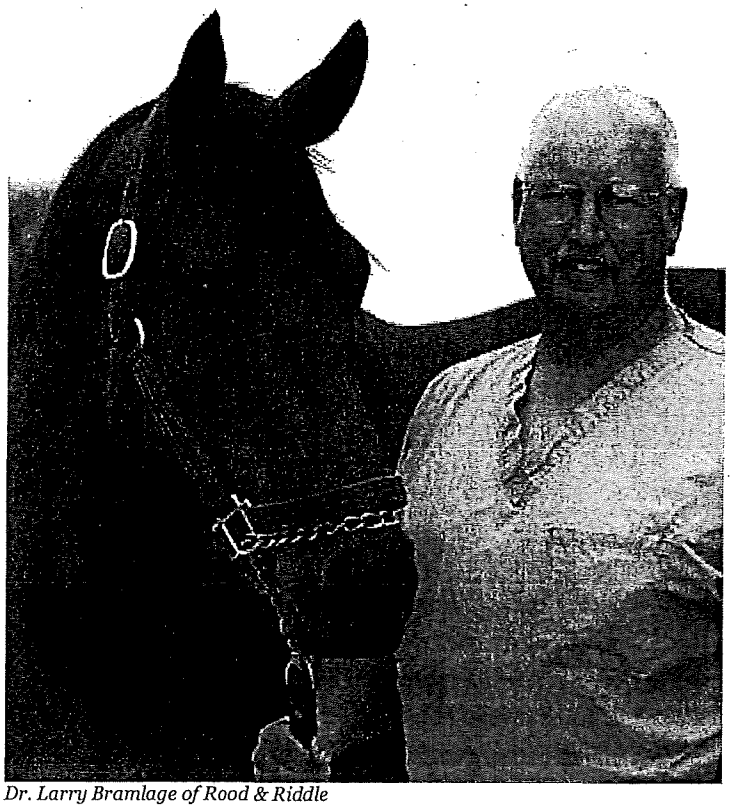
allowing osteoblasts to lay down the better organized and stronger lamellar bone. The lamellar bone fills in the crack and makes the bone whole again, both practically and on radiograph.

Bones are constantly breaking down and building back up in response to normal wear and tear and training.

Bisphosphonates work by poisoning osteoclasts and for this reason are used to slow osteoporosis in people. They also have an analgesic effect, which is why they are used in human bone tumor patients. This is also why they are presented as an option for horses dealing with painful and hard-to-pinpoint inflammation due to navicular syndrome.

Bramlage is finding bisphosphonates' mechanism of action also disrupts the natural healing process in young horses during training.

"I thought initially it might create a lot of acute fractures," he said. "I don't think it increases their incidence very much. Where it causes a problem is whenever you're trying to heal something that's happened as a result of training and needs to repair. Part of the horse's natural coping mechanism is disabled."



Dr. Larry Bramlage of Rood & Riddle

Bramlage is seeing stunted healing on radiographs of

horses who have had surgery or rest to repair fractures which normally would have improved in a couple of months. Sometimes as much as 14 months after injury, the x-rays still show the injuries that have been "patched up" with woven bone still persist with original fractures visible.

"I've spent 40 years looking at horses' bones trying to understand the process of damage and repair that we consistently deal with in the racehorse. In the last two years we've had horses' injuries that don't behave anything like they did in my first 40 years," he said. "We can no longer depend on the repair process that we have come to expect as normal for the horse.
Bisphosphonates also 'mute' the normal bone turnover we depend on in bone scans."

Bisphosphonates don't stop horses from making new bone, which Bramlage says is the reason the drugs don't seem to be causing fractures. They do stop osteoclasts from clearing the weak woven bone out of the way of osteoblasts putting in the strong stuff. The radiographs show new layers of bone being added over cracks but not remodeling of the fractures themselves. As a result, a horse's bone gets denser on the radiographs because of the added woven bone but it doesn't get stronger or repair. Bramlage said the drug does nothing to prompt osteoblasts to work harder as some have theorized, so it doesn't speed this layering process, either.

This mechanism doesn't raise the same problems in pleasure horses because their bones aren't subjected to the volume of stress and rapid need for repair.

Bisphosphonates can cause problems healing bones in humans, too. Bramlage recently spoke to several human surgeons about patients who are unlucky enough to break a bone after they've been on bisphosphonates to prevent osteoporosis.

"If you break your femur, which is a common injury of patients on bisphosphonates, in a normal case they make you non-weight bearing for six weeks. They'd give you crutches and a walker for six weeks. At about three months, you can be weight bearing again," he said. "If you've had bisphosphonates they'll make you non-weight bearing for up to eight months because that's how much it slows healing in people."

All of this seems to Bramlage like a poor trade-off for a pain-relieving effect that probably wears off in about 30 days. (Bisphosphonates are shown to attach to the bone's surface after administration and persist for years even after just one dose. Repeated doses cause cumulative levels on the interior surfaces of the bones.)

Bramlage said it's important to note that because of the drug's long life on bone surfaces, a trainer currently in possession of a horse may not be the one who originally gave the horse bisphosphonates and may not even know the horse has been exposed to the drug.

"Unfortunately a lot of people who are giving it and are having it given, don't understand the price. They see a temporary improvement in the horse's lameness and they don't understand that what happens months later may be related," he said. "The people who are in charge when the horse gets the drug don't have to be in charge when you're trying to rehab the horse and get it back to racing. So the lay-up facilities, the owners, and the horses pay the price for the remodeling debt precipitated by the use of the bisphosphonates. I am convinced some horses that we would have rehabilitated effectively in the past never make it back to form because of their history of bisphosphonate use."

The issues Bramlage is seeing are in horses that have been given bisphosphonates outside manufacturer guidelines. The guidelines state the drugs should not be administered to horses under the age of five. A quick look at the drug literature will make the intended use clear.

"If you're interested in using them, you should go to the manufacturer's website because more than 50 percent of the package insert is telling you why you shouldn't use them in young horses," he said. "However, they're perfectly willing to sell them to you for use in young horses. All of those disclaimers are meant to put the blame for anything bad that happens to your young training horse on you and not the company."

Bisphosphonates became a concern for racing regulators in 2015 when the Kentucky Equine Drug Research Council announced its intent to study the drugs after receiving information some managers and trainers could be using it for its analgesic effect.

In England, the British Horseracing Authority issued a mandatory 30-day stand-down period for horses receiving bisphosphonates and prohibits their use in horses less than 3 1/2 years of age. Unfortunately, the drug is difficult to test for and Bramlage worries the temptation of general analgesia can prove too much for some horsemen.

"Routine use of it I think is accelerating on the racetrack based on the number of horses we see that don't follow the normal healing pattern," he said. "That's a temporary fix, and there's a price to pay."

email newsletter to keep up on this and other stories happening in the Thoroughbred industry.

This entry was posted in Horse Care, NL List and tagged bisphosphonates, Dr. Larry Bramlage, fracture repair in horses, Kentucky Equine Drug Research Council, Rood and Riddle Equine Hospital by Natalie Voss. Bookmark the permalink.

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Item 1

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Medication, Safety and Welfare Committee Meeting
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Rick M. Arthur, DVM, Equine Medical Director

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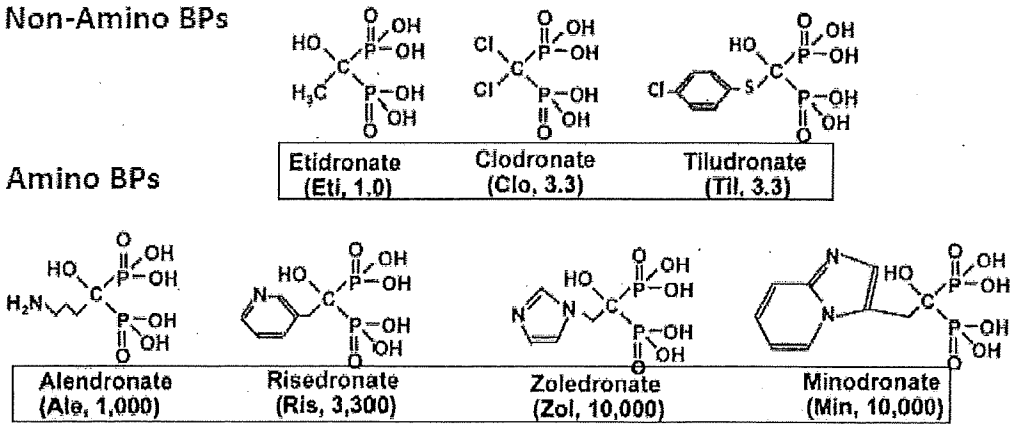
- Amino group have much greater affinity for hydroxyapatite
  ➔ more potentent inhibitors of bone resorption



Since 2015, the British Horse Racing Authority (BHA) has restricted the use of bisphosphonates to horses over 3 years and six months. The BHA regulation and advisory is attached. More recently the International Federation Horseracing Authority (IFHA) has reviewed the use of bisphosphonates from both an animal welfare perspective and an anti-doping perspective. The former is related to their effects on normal bone remodeling in young athletes; the latter is for their direct analgesic effects with bone pain. The analgesic effects of bisphosphonates on bone pain in humans and laboratory animals are well documented. When adopted the IFHA international agreement will very likely look similar to the current BHA regulation.

Dr. Chris Riggs, Chief of Clinical Veterinary Services for the Hong Kong Jockey Club, gave a review at the 2018 ICRAV in Dubai on their experience with bisphosphonate use in Hong Kong. All veterinarians doing working on horses work for the Hong Kong Jockey Club. Procedures and prescribing policies are strictly controlled and the average age of their horse population is close to 4½ YO. There are no 2YO's and most horses don't come into Hong Kong before their 3YO year. In their controlled clinical environment, older horse population, and excellent clinical records, they have not recognized complications with bisphosphonates in a little over 100 cases over the last 5 years. I've attached a few slides from his presentation in Hong Kong in 2017

More recently, in the US, prominent equine surgeon Dr. Larry Bramlage, expressed his concern on overuse of bisphosphonates in his clinical experience. His case load would include young horses without restricted use protocols as seen in Hong Kong. Dr. Bramlage's recent interview discussing his clinical experience related to bisphosphonates is attached.

FDA Provides Equine Veterinarians with Important Information about TILDREN and OSPHOS for Navicular Syndrome in Horses

In the first half of 2014, FDA approved two new equine drugs—TILDREN distributed by Ceva Sante Animale and OSPHOS distributed by Dechra, Ltd.—intended to control the clinical signs of navicular syndrome, a common cause of forelimb lameness in horses. Below is a brief reference guide for equine veterinarians on both drugs.

What are the active ingredients in TILDREN and OSPHOS and how do they work?

The active ingredient in TILDREN is tiludronate disodium, and the active ingredient in OSPHOS is clodronate disodium. Both belong in the bisphosphonate drug class and the exact mechanism of action in horses with navicular syndrome is unknown.

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What are bisphosphonates?

Bisphosphonates are a class of drugs commonly prescribed to prevent bone loss in people. While TILDREN and OSPHOS are not used for this purpose in horses, knowing how bisphosphonates work in people will help you better understand this drug class overall and especially the adverse reactions seen in horses.

Bones undergo constant turnover, with osteoblasts forming bone and osteoclasts resorbing it. In normal bone tissue, there is a balance between bone formation and bone resorption. But in diseased bone tissue, this balance is disrupted. Bisphosphonates inhibit bone resorption by encouraging osteoclasts to undergo cell death, leading to a decrease in the breakdown of bone.

Bisphosphonates preferentially "stick" to calcium and bind to it. Because most of the body's calcium is stored in bones, these drugs accumulate to a high concentration only in bones. Bisphosphonates are incorporated into the bone matrix and are gradually released over months to years.

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What are the precautions for bisphosphonates?

As a class, bisphosphonates can cause gastrointestinal and renal toxicity. Higher blood plasma levels may increase the risk of toxicity. Because bisphosphonates are excreted by the kidneys, conditions that impair renal function may increase the blood plasma level and lead to more adverse reactions. It is not recommended to use bisphosphonates in horses with impaired renal function. Use caution if you give bisphosphonates along with other potentially nephrotoxic drugs, and be sure to monitor renal function.

Bisphosphonates can cause signs of colic in horses, including abdominal pain, discomfort, and agitation. These colic signs usually occur shortly after the drug is given and may be associated with altered intestinal motility.

Bisphosphonates affect the blood plasma levels of some minerals and electrolytes, such as calcium, magnesium and potassium. The effects are immediate and can last up to several hours. Use caution when you give bisphosphonates to horses with conditions affecting mineral or electrolyte homeostasis (for example, hyperkalemic periodic paralysis or hypocalcemia) or conditions which may be worsened by hypocalcemia (for example, cardiac disease).

The safe use of either TILDREN or OSPHOS has not been evaluated in horses less than 4 years of age. The effect of bisphosphonates on the skeleton of growing horses has not been studied. Because bisphosphonates inhibit osteoclast activity and decrease bone turnover, these drugs may affect bone growth.

The safe use of either TILDREN or OSPHOS has not been evaluated in breeding horses or pregnant or lactating mares. Bisphosphonates have been shown to cause abnormal fetal development in laboratory animals. The uptake of bisphosphonates into fetal bone may be greater than into maternal bone, creating a possible risk of skeletal or other abnormalities in the fetus. Bisphosphonates may be excreted in milk and absorbed by nursing animals.

Increased bone fragility has been seen in animals given bisphosphonates at high doses or for long periods of time. Because bisphosphonates inhibit bone resorption and decrease bone turnover, the body may be unable to repair microdamage within a bone.

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How do you administer TILDREN and OSPHOS?

TILDREN and OSPHOS are prescription animal drugs and federal law restricts them to use by or on the order of a licensed veterinarian. Although both drugs are in the same drug class, they have different routes of administration.

After reconstituting TILDREN with sterile 0.9% sodium chloride, you administer the drug by intravenous infusion into a jugular catheter **slowly** and **evenly** over 90 minutes to minimize the risk of adverse reactions. It may take two months to see the maximum effect.

You administer OSPHOS by intramuscular injection. The total volume should be divided equally into three injection sites. Similar to TILDREN, it may take two months to see the most clinical improvement.

For horses that initially respond to OSPHOS but don't maintain their clinical improvement for 6 months, you may re-administer the drug at 3- to 6-month intervals based on clinical signs. For horses that respond to OSPHOS and maintain their clinical improvement for 6 months, you should re-administer after clinical signs recur.

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What are the contraindications for TILDREN?

Do not give TILDREN to horses with a known hypersensitivity to the active ingredient, tiludronate disodium, or to mannitol. Also do not use the drug in horses with impaired renal function or with a history of renal disease. **Nonsteroidal anti-inflammatory drugs (NSAIDs) should not be used concurrently with TILDREN as this may increase the risk of renal toxicity and acute renal failure.** While no safe window for the concurrent use of NSAIDS and TILDREN has been determined, it may be especially risky to give an NSAID from 48 hours before to 48 hours after treatment with TILDREN. Make sure you observe appropriate wash-out periods between NSAID and TILDREN administration and monitor blood urea nitrogen and creatinine values.

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What are the contraindications for OSPHOS?

Do not give OSPHOS to horses with a known hypersensitivity to clodronate disodium.

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What adverse reactions are caused by TILDREN?

In three field studies, adverse reactions in horses treated with TILDREN most

commonly occurred during the 90-minute intravenous infusion or within four hours following the end of the infusion. The most common reaction was colic.

Expect about 30 to 45 percent of horses given TILDREN to show transient signs of colic. Hoses should be observed closely for four hours after treatment. Colic signs can last about 90 minutes and may be intermittent. In many cases, hand-walking may improve or resolve the colic signs. **If a horse needs medical therapy, you should give non-NSAID treatments, as the concurrent use of an NSAID increases the risk of renal toxicity and acute renal failure.**

In the field studies, adverse reactions occurring between four hours and one day after treatment included:

- Increased frequency of urination with or without increased drinking;
- Reduced appetite;
- Sore or stiff neck;
- Fever; and
- Colic - this was the most common adverse reaction.

When giving TILDREN, you should advise owners of the potential for adverse reactions in the hours or days following treatment. Also tell owners to consult you before giving their horse any NSAID after treatment with TILDREN.

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What adverse reactions are caused by OSPHOS?

In the effectiveness field study, adverse reactions in horses treated with OSPHOS usually began within two hours of treatment. The most common adverse reactions were discomfort, agitation, pawing, and signs of colic. In the safety study, several horses treated with OSPHOS developed soft or firm injection site swellings, which resolved within 10 days.

When giving OSPHOS, you should advise owners to watch their horse for at least two hours after treatment for agitation, signs of colic, and other abnormal behavior, such as head shaking and lip licking. If a horse seems uncomfortable or nervous or experiences cramping, tell the owner to hand-walk the horse for 15 minutes. Advise the owner to contact you if signs don't resolve or if the horse displays other abnormal symptoms.

Read the package inserts for TILDREN and OSPHOS for a complete description of the contraindications, warnings, and precautions for each drug.

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Should you report problems related to TILDREN or OSPHOS?

Yes. FDA encourages veterinarians to report all problems related to TILDREN or OSPHOS. Problems include adverse drug events and product defects. An adverse

drug event, also called an adverse drug experience, is an undesired side effect associated with a drug or a lack of effectiveness. Adverse drug events also include unfavorable reactions in people who handle the drug. Product defects are problems such as defective packaging or an abnormal appearance of the drug. Please see **How to Report Animal Drug Side Effects and Product Problems (/AnimalVeterinary/SafetyHealth/ReportaProblem/ucm055305.htm)**.

Ceva Sante Animale (for TILDREN) and Dechra, Ltd. (for OSPHOS) are required to submit to FDA all reports of adverse drug events and product defects that they receive. FDA reviews the reports to identify potential safety and effectiveness concerns that may not have been apparent at the time of drug approval. FDA conducts this post-marketing monitoring to make sure that TILDREN and OSPHOS continue to meet the required standards for safety and effectiveness established during the approval process.

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Important information for your client

The package insert for TILDREN has a section called "Information for Owners" and the package insert for OSPHOS has a similar section called "Information for Horse Owners." These sections may help you in your communication with clients regarding both drugs.

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What are the benefits of using an FDA-approved equine drug?

A main benefit of using an FDA-approved equine drug is that you know the drug is safe and effective in horses when used according to the label. A second benefit is that the label is written specifically for horses and includes all necessary information, including associated risks, so you can use the drug safely and effectively in your patients.

FDA rigorously evaluates an animal drug before approving it. As part of the approval process, the drug company must prove to FDA that:

- The drug is safe and effective for a specific use in a specific animal species;
- The manufacturing process is adequate to preserve the drug's identity, strength, quality, and purity. The company must show that the drug can be consistently produced from batch to batch; and
- The drug's labeling is truthful, complete, and not misleading.

FDA's role does not stop after the agency approves an animal drug. As long as the drug company markets the animal drug, the agency continues to monitor:

- The drug's safety and effectiveness. Sometimes, the agency's post-approval monitoring uncovers safety and effectiveness issues that were unknown at the time of approval;
- The manufacturing process to ensure quality and consistency are maintained from

batch to batch;

- The drug's labeling to make sure the information remains truthful, complete, and not misleading; and
- The company's marketing communications related to the drug to make sure the information is truthful and not misleading.

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For more information

If you have questions or want more information, please contact CVM's Education & Outreach Staff at 240-402-7002 or **AskCVM@fda.hhs.gov (mailto:AskCVM@fda.hhs.gov)**.

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References

- **Freedom of Information Summary, Original New Animal Drug Application, NADA 141-420, for TILDREN ()**. February 13, 2014.
- **Freedom of Information Summary, Original New Animal Drug Application, NADA 141-427, for OSPHOS ()**. April 28, 2014.

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More in Resources for You (/AnimalVeterinary/ResourcesforYou/default.htm)

For Industry (/AnimalVeterinary/ResourcesforYou/ucm508946.htm)

For Veterinarians (/AnimalVeterinary/ResourcesforYou/ucm214771.htm)

Publicaciones en Español del Centro de Medicina Veterinaria (CVM) (/AnimalVeterinary/ResourcesforYou/ucm135578.htm)

Animal Health Literacy (/AnimalVeterinary/ResourcesforYou/AnimalHealthLiteracy/default.htm)

BHA

NEW STAND-DOWN PERIOD: BISPHOSPHONATES

The British Horseracing Authority (BHA) would like to advise the Responsible Person (i.e. trainers, owners, breeders) and their veterinary surgeons of a new Rule requiring a mandatory 30 day Stand-Down period from racing following the administration of any bisphosphonate licensed for equine use. This Rule will be effective from 10 August 2017.

The Rule, an addition to Schedule (B)3 – Requirements for horse to run, will read as follows:

"11B The horse must not have been administered

11.B.1any bisphosphonate under the age of three years and six months as determined by its recorded date of birth, or

11.B.2 any bisphosphonate on the day of the race or on any of the 30 days before the day of the race in which the horse is declared to run".

The BHA expectations with regard to the use of bisphosphonates in horses racing or intending to race in Great Britain in order to comply with the Rules of Racing

- The product used should be licensed for use in horses the UK;
- The horse must be over three years and six months of age at the time of administration as determined by its recorded date of birth;
- There must be a diagnosis determined by a veterinary surgeon that supports the use of a bisphosphonate as an appropriate treatment; and
- The bisphosphonate must be administered by a veterinary surgeon.

Due to their complex nature and action, the excretion of bisphosphonates may be unpredictable, leading to considerable variation in excretion times. This variability may be increased when bisphosphonates are administered to horses with on-going musculoskeletal disease process, including the possibility that bisphosphonates may be released from bone at a period remote from initial administration. As such, it cannot be guaranteed that future musculoskeletal disease processes will not result in an Adverse Analytical Finding.

As a guide, the BHA are aware of data from studies in **normal horses** which indicate that if a single dose of Tildren® (CEVA) at 1 mg/kg were administered intravenously, the Detection Time would be unlikely to exceed the Stand-Down period. A discussion between the Responsible Person and their veterinary surgeon is essential when considering administration of any medication which is a Prohibited Substance on raceday.

03 July 2017

THE USE OF BISPHOSPHONATES IN THE RACEHORSE

Christopher Riggs

Department of Veterinary Clinical Services
The Hong Kong Jockey Club

香港賽馬會
The Hong Kong Jockey Club

WHAT ARE BPS USED FOR IN RACEHORSES?

- Disease of subchondral bone of fetlock, carpus
- Osteo-arFcular pain in any locaFon
- Pain arising from the thoracolumbar and pelvic regions
- PrevenFon of stress fractures
- Treatment of stress fractures
- To improve the acFon of "poor movers"
- Treatment of general fetlock pain when all else fails
- To treat any condiFon affecFng Fssues starFng with "b", "c", "l", "m" or "t"!
- To get a lame horse to a race!!

POTENTIAL RISKS OF BPS IN RACEHORSES

- Inhibit the biological mechanism for bone maintenance/ repair è accumulaFon of microdamage è bone fragility
- Inhibit "turn-over" of bone matrix è excessive mineralisaFon è bone fragility
- Interfere with fracture healing è delayed union/ non union
- Damage arFcular carFlage è accelerate joint degeneraFon
- Potent analgesics è may disguise signs of underlying, serious injury
- Interfere with calcium homeostasis è may predispose to other disease (e.g. cardiac arrhythmias)
- Cause retenFon of calcified growth carFlage in skeletally immature animals è developmental orthopaedic disease

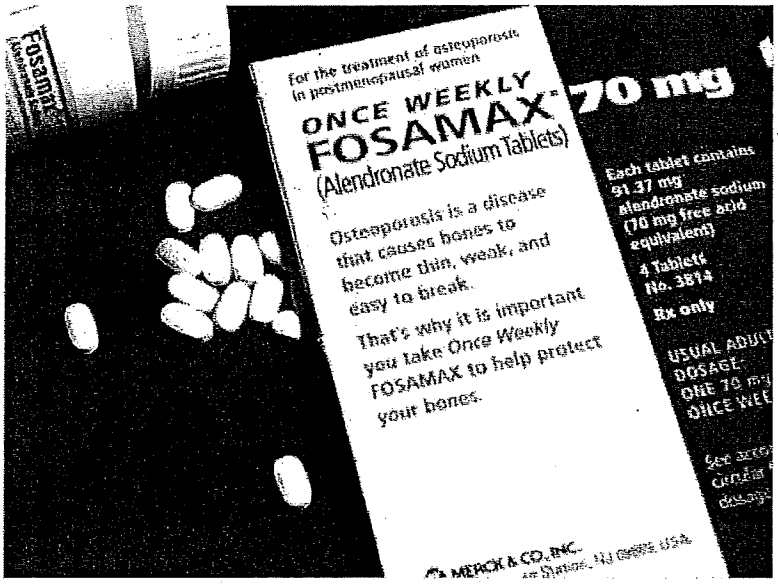
POTENTIAL RISKS OF BPS IN RACEHORSES

What can we learn from experimental work in other species and human clinical studies?

1. Do they lead to bone fragility?
2. Do they prevent fracture healing?
3. Are they effecFve in prevenFng stress fractures?
4. Do they have analgesic properFes?
5. Are they detrimental or beneficial in the treatment of osteoarthriFs?

Bramlage: 'Price To Pay' For Bisphosphonate Use Is Delayed Healing

by Natalie Voss | 03.01.2018 | 5:13pm



The human drug Fosamax is a bisphosphonate

"I wish we'd never seen these drugs," said renowned orthopedic surgeon Dr. Larry Bramlage at the conclusion of a recent presentation about bisphosphonates.

Four years after the Food and Drug Administration approved the use of Tildren and Osphos (both trade names for bisphosphonates) for use in adult horses suffering from navicular syndrome, Bramlage said he's seeing unintended side effects from people using the drug off label.

As Bramlage explained at a recent client education seminar held by Rood and Riddle Equine Hospital, there are three main types of cells associated with bone repair and growth: osteoblasts, which make new bone; osteoclasts, which break down damaged or inferior bone, and osteocytes, which direct the repair.

When a horse has a fracture, the crack is initially filled by the osteoblasts with a temporary boney substance called woven bone, which can be made very quickly but is not very strong. Over time, osteoclasts clear away woven bone, which is poorly organized and weak,

allowing osteoblasts to lay down the better organized and stronger lamellar bone. The lamellar bone fills in the crack and makes the bone whole again, both practically and on radiograph.

Bones are constantly breaking down and building back up in response to normal wear and tear and training.

Bisphosphonates work by poisoning osteoclasts and for this reason are used to slow osteoporosis in people. They also have an analgesic effect, which is why they are used in human bone tumor patients. This is also why they are presented as an option for horses dealing with painful and hard-to-pinpoint inflammation due to navicular syndrome.

Bramlage is finding bisphosphonates' mechanism of action also disrupts the natural healing process in young horses during training.

"I thought initially it might create a lot of acute fractures," he said. "I don't think it increases their incidence very much. Where it causes a problem is whenever you're trying to heal something that's happened as a result of training and needs to repair. Part of the horse's natural coping mechanism is disabled."

Dr. Larry Bramlage of Rood & Riddle

Bramlage is seeing stunted healing on radiographs of

horses who have had surgery or rest to repair fractures which normally would have improved in a couple of months. Sometimes as much as 14 months after injury, the x-rays still show the injuries that have been "patched up" with woven bone still persist with original fractures visible.

"I've spent 40 years looking at horses' bones trying to understand the process of damage and repair that we consistently deal with in the racehorse. In the last two years we've had horses' injuries that don't behave anything like they did in my first 40 years," he said. "We can no longer depend on the repair process that we have come to expect as normal for the horse. Bisphosphonates also 'mute' the normal bone turnover we depend on in bone scans."

Bisphosphonates don't stop horses from making new bone, which Bramlage says is the reason the drugs don't seem to be causing fractures. They do stop osteoclasts from clearing the weak woven bone out of the way of osteoblasts putting in the strong stuff. The radiographs show new layers of bone being added over cracks but not remodeling of the fractures themselves. As a result, a horse's bone gets denser on the radiographs because of the added woven bone but it doesn't get stronger or repair. Bramlage said the drug does nothing to prompt osteoblasts to work harder as some have theorized, so it doesn't speed this layering process, either.

This mechanism doesn't raise the same problems in pleasure horses because their bones aren't subjected to the volume of stress and rapid need for repair.

Bisphosphonates can cause problems healing bones in humans, too. Bramlage recently spoke to several human surgeons about patients who are unlucky enough to break a bone after they've been on bisphosphonates to prevent osteoporosis.

"If you break your femur, which is a common injury of patients on bisphosphonates, in a normal case they make you non-weight bearing for six weeks. They'd give you crutches and a walker for six weeks. At about three months, you can be weight bearing again," he said. "If you've had bisphosphonates they'll make you non-weight bearing for up to eight months because that's how much it slows healing in people."

All of this seems to Bramlage like a poor trade-off for a pain-relieving effect that probably wears off in about 30 days. (Bisphosphonates are shown to attach to the bone's surface after administration and persist for years even after just one dose. Repeated doses cause cumulative levels on the interior surfaces of the bones.)

Bramlage said it's important to note that because of the drug's long life on bone surfaces, a trainer currently in possession of a horse may not be the one who originally gave the horse bisphosphonates and may not even know the horse has been exposed to the drug.

"Unfortunately a lot of people who are giving it and are having it given, don't understand the price. They see a temporary improvement in the horse's lameness and they don't understand that what happens months later may be related," he said. "The people who are in charge when the horse gets the drug don't have to be in charge when you're trying to rehab the horse and get it back to racing. So the lay-up facilities, the owners, and the horses pay the price for the remodeling debt precipitated by the use of the bisphosphonates. I am convinced some horses that we would have rehabilitated effectively in the past never make it back to form because of their history of bisphosphonate use."

The issues Bramlage is seeing are in horses that have been given bisphosphonates outside manufacturer guidelines. The guidelines state the drugs should not be administered to horses under the age of five. A quick look at the drug literature will make the intended use clear.

"If you're interested in using them, you should go to the manufacturer's website because more than 50 percent of the package insert is telling you why you shouldn't use them in young horses," he said. "However, they're perfectly willing to sell them to you for use in young horses. All of those disclaimers are meant to put the blame for anything bad that happens to your young training horse on you and not the company."

Bisphosphonates became a concern for racing regulators in 2015 when the Kentucky Equine Drug Research Council announced its intent to study the drugs after receiving information some managers and trainers could be using it for its analgesic effect.

In England, the British Horseracing Authority issued a mandatory 30-day stand-down period for horses receiving bisphosphonates and prohibits their use in horses less than 3 1/2 years of age. Unfortunately, the drug is difficult to test for and Bramlage worries the temptation of general analgesia can prove too much for some horsemen.

"Routine use of it I think is accelerating on the racetrack based on the number of horses we see that don't follow the normal healing pattern," he said. "That's a temporary fix, and there's a price to pay."

New to the Paulick Report? Click here to sign up for our daily

email newsletter to keep up on this and other stories happening in the Thoroughbred industry.

This entry was posted in Horse Care, NL List and tagged bisphosphonates, Dr. Larry Bramlage, fracture repair in horses, Kentucky Equine Drug Research Council, Rood and Riddle Equine Hospital by Natalie Voss. Bookmark the permalink.

1-17

CALIFORNIA HORSE RACING BOARD

APRIL 18, 2018
COMMITTEE MEETING

There is no material for Item 2

Item 3

STAFF ANALYSIS
DISCUSSION AND ACTION REGARDING
THE PROPOSED ADDITION OF
RULE 1503.5. CONTINUING EDUCATION FOR TRAINERS AND ASSISTANT TRAINERS TO REQUIRE CONTINUING EDUCATION AS A CONDITION OF RENEWAL OF LICENSE FOR TRAINER OR ASSISTANT TRAINER

Medication, Safety and Welfare Committee Meeting
April 18, 2018

ISSUE

The Board requires first time applicants for license as trainer or assistant trainer to pass written, oral and practical examinations prior to issuance of a license. However, upon renewal of license, the applicant is only required to fill out the application forms and pays a fee. The Board currently does not require trainers or assistant trainers to demonstrate that they have taken any actions to improve their level of horsemanship, or have made efforts to keep abreast of equine medication, health or safety issues. The proposed addition of Rule 1503.5, Continuing Education for Trainers and Assistant Trainers, will address the issue by requiring that applicants for renewal of a CHRB license as trainer or assistant trainer certify that they have completed a total of 12 hours of approved continuing education (ACE) coursework over the previous 36 month period.

ANALYSIS

Trainers' and assistant trainers' duties involve considerable responsibility, complexity and variety. They decide the day-to-day preparations needed to train a horse to run in a race. They manage the care, feeding and grooming regimen of the horse, as well as the horse's exercise and rest. In addition, trainers in large part make decisions regarding the drugs and physical therapy treatments their horses receive. Ideally, trainers and assistant trainers work to run stables that are efficient, cost effective and successful, and they hire and train employees in the best practices. All of this requires that trainers and assistant trainers must be informed about changing theories in training methods, or discoveries regarding the physiological effects of exercise, or research regarding medications and its effects on the horses in their care. They must also be aware of issues that involve stable management and their employees. To ensure California's trainers and assistant trainers are keeping abreast of changes in their profession, the proposed addition of Rule 1503.5 requires that applicants for renewal of a CHRB license as trainer or assistant trainer certify that they have completed a total of 12 hours of ACE coursework over the previous 36 month period. The rule defines such coursework as instruction intended to foster competence in horsemanship, and which specifically promotes compliance with horse racing law and regulations, equine health, safety and welfare in racing, or promotes human safety and welfare. Under Rule 1503.5, the Board is required to keep a current posting of approved ACE courses on its website and at all CHRB offices. If a trainer or assistant trainer fails to keep adequate ACE coursework records, he or she may be ineligible to renew a license, and must complete the required education prior to renewal. Falsification of ACE coursework records will result in the issuance of fines and suspension or revocation of license. Applicants for renewal of a trainer or assistant trainer license who are not

domiciled in California and who have has 12 or fewer starts in races other than stakes races in California may obtain an exemption from the ACE coursework requirements.

BACKGROUND

Business and Professions Code section 19420 states jurisdiction and supervision over meetings in this state where horse races with wagering on their results are held or conducted, and over all persons or things having to do the operation of such meetings is vested in the CHRB. Business and Professions Code section 19440 provides that the California Horse Racing Board shall have all powers necessary and proper to enable it to carry out fully and effectually the purposes of Horse Racing Law. Responsibilities of the Board include adopting rules and regulations for the protection of the public and the control of horse racing and pari-mutuel wagering. Business and Professions Code section 19460 states all licenses granted under this chapter shall be in writing and shall contain such conditions as are deemed necessary or desirable by the Board for the best interests of horse racing. Business and Professions Code section 19520 provides that every person who participates in, or has anything to do with, the racing of horses, shall be licensed by the Board pursuant to the rules and regulations that the Board may adopt.

RECOMMENDATION

This item is presented for Committee discussion and action.

CALIFORNIA HORSE RACING BOARD
TITLE 4. CALIFORNIA CODE OF REGULATIONS
ARTICLE 4. OCCUPATIONAL LICENSES
PROPOSED ADDITION OF
1503.5. CONTINUING EDUCATION FOR TRAINERS AND ASSISTANT TRAINERS

Medication, Safety and Welfare Committee Meeting
April 18, 2018

1503.5. Continuing Education for Trainers and Assistant Trainers

(a) Commencing January 1, 2020, an applicant for renewal of license as trainer or assistant trainer shall certify that during the preceding 36-month period, he or she has completed a total of 12 hours of approved continuing education (ACE) coursework.

(1) Certification of completion of ACE coursework shall be provided on the form CHRB-59a Certification of Approved Continuing Education (ACE) Coursework (New 06/18), which is hereby incorporated by reference. The CHRB-59a shall be submitted with the application for renewal of license.

(b) Records of completed ACE coursework shall be maintained for a period of four years from the date the course was completed, and licensees shall provide such records to the Board upon request. Records of ACE coursework may be in a form provided by an ACE course, meeting or conference, or shall be recorded on the form CHRB-242 Continuing Education Certificate of Attendance (New 6/18), which is hereby incorporated by reference. The CHRB-242 shall be available at all CHRB offices and on the Board's website. Any record of ACE coursework shall state at least:

(1) The title of the ACE course, meeting or conference;

(2) The date, location and provider of the ACE course, meeting or conference;

(3) The number of continuing education hours earned.

(4) Failure to maintain or produce records of completed ACE coursework may result in the applicant's inability to renew a license as trainer or assistant trainer.

(c) The stewards shall fine and/or suspend or revoke the license of any applicant for renewal of license as trainer or assistant trainer who is found to have provided false certification of completed ACE coursework.

(d) The stewards may waive the ACE requirements for applicants for renewal of license as trainer or assistant trainer who are not domiciled in California, and who have had twelve or fewer starts in races other than stakes races in California during the previous 36-month period.

(1) Requests for ACE waivers shall be submitted to the Board of Stewards at the time of application for renewal of license on the form CHRB-59b Request for Waiver of Approved Continuing Education (ACE) Requirements (New 06/18), which is hereby incorporated by reference.

(2) Upon the stewards' verification of the CHRB Form 59b, waiver may be granted.

(3) Denial of a waiver will result in the applicant being ineligible for renewal of license until he or she has completed the requirements of subsection (a) of this regulation.

(e) A current list of ACE courses shall be available at all CHRB offices and on the Board's website.

(1) If a licensee has completed ACE coursework, and the course is subsequently removed from the Board's listing of ACE courses, the ACE course completed by the licensee will satisfy the requirements under subsection (a) of this regulation.

(f) For the purposes of this regulation, ACE coursework means instruction intended to foster competence and knowledge in horsemanship, and which specifically promotes: compliance with California's horse racing law and regulations; equine health, safety, and welfare in racing; or

promotes human safety and welfare.

Authority: Sections 19420, 19440, 19460 and 19520, Business and Professions Code.
Reference: Sections 19420 and 19440, Business and Professions Code.

State of California
CALIFORNIA HORSE RACING BOARD
CHRB-59a (New-06/18)

License Number:_____

CERTIFICATION OF APPROVED CONTINUING EDUCATION (ACE) COURSEWORK

I_____, certify that I have completed _____hours of ACE
(NAME)
Coursework during the period of _____ through_____.
(DATE) (DATE)

Per Rule 1503.5, applicants shall maintain records of completed ACE coursework for a period of four years from the date of completion, and shall provide such records to the Board upon request.

I hereby make application for license to be issued in accordance with the terms and provisions of the Rules and Regulations of the California Horse Racing Board. I certify under penalty of perjury that the statements and answers I have made in this application are true and correct.

_____ _____
(DATE) (SIGNATURE)

INFORMATION PROVIDED ABOVE IS PUBLIC PURSUANT TO THE CALIFORNIA PUBLIC RECORDS ACT (Government Code section 6250 et seq.)

State of California
CALIFORNIA HORSE RACING BOARD
CHRB-59b (New-06/18)

License Number:_____

REQUEST FOR WAIVER OF APPROVED CONTINUING EDUCATION (ACE) REQUIREMENTS

I_____, certify that I am a resident of _____,
(NAME) (CITY/STATE)

And have had twelve or fewer starts in California for the period of _____ through_____.

List all starts in California over the previous 36-month period on the reverse of this form. Per Rule 1503.5, stakes races are not counted in the number of starts.

I hereby make application for license to be issued in accordance with the terms and provisions of the Rules and Regulations of the California Horse Racing Board. I certify under penalty of perjury that the statements and answers I have made in this application are true and correct.

_____ _____
(DATE) (SIGNATURE)

INFORMATION PROVIDED ABOVE IS PUBLIC PURSUANT TO THE CALIFORNIA PUBLIC RECORDS ACT (Government Code section 6250 et seq.)

List all California starts, including track & date, over the previous 36-months. Do NOT list stakes races.

1. _____ 8. _____
2. _____ 9. _____
3. _____ 10. _____
4. _____ 11. _____
5. _____ 12. _____
6. _____ 13. _____

Approve: _____ Disapprove:_____ _____
(Steward's Signature and Date)

I hereby make application for license to be issued in accordance with the terms and provisions of the Rules and Regulations of the California Horse Racing Board. I certify under penalty of perjury that the statements and answers I have made in this application are true and correct.

INFORMATION PROVIDED ABOVE IS PUBLIC PURSUANT TO THE CALIFORNIA PUBLIC RECORDS ACT (Government Code section 6250 et seq.)

State of California
California Horse Racing Board
CHRB-242 (New 06/18)

CONTINUING EDUCATION CERTIFICATE OF ATTENDANCE

Meeting/Conference Title: _____

Date: _____ Location: _____

Provider: _____

Presentation/Topic: _____

Program Speaker(s) (If any): _____

Name of Licensee (Print): _____

CHRB License Number: _____

I certify that I attended the ACE coursework described above for a total of ___ Continuing education hour(s).

Signature: _____ Date: _____

INSTRUCTIONS

Per Rule 1503.5, Continuing Education for Trainers and Assistant Trainers, licensees shall maintain records of completed ACE coursework for a period of four years from the date the course was completed and shall provide such records to the Board upon request. Individual licensees are responsible for the completeness and accuracy of their own ACE records. By signing this form you are certifying under penalty of perjury that the statements and answers you have made on this form are true and correct.

Item 4

STAFF ANALYSIS
DISCUSSION AND ACTION REGARDING
THE PROPOSED AMENDMENT TO
CHRB RULE 1843.2, CLASSIFICATION OF DRUG SUBSTANCES,
TO UPDATE THE
CHRB CLASSIFICATION OF FOREIGN SUBSTANCES LISTING

Medication, Safety and Welfare Committee Meeting
April 18, 2019

ISSUE

The California Horse Racing Board (CHRB) Penalty Category Listing by Classification is incorporated by reference in Rule 1843.2, Classification of Drug Substances, and is modeled on the Association of Racing Commissioners International (ARCI) Uniform Classification Guidelines for Foreign Substances. With the exception of an amendment in 2015 to add cobalt, the Penalty Category Listing has not been significantly updated since 2013. However, during the intervening years there have been many changes to the ARCI document. The proposal to amend Rule 1843.2 will update the regulation to bring it in line with the current ARCI Uniform Classification Guidelines for Foreign Substances.

ANALYSIS

The proposed amendment to Rule 1843.2 will delete the CHRB Penalty Categories Listing by Classification and replace it with a new form: CHRB 1843.2 Classification of Foreign Substances Alphabetical Substance List. The Alphabetical Substance List is in a more user friendly format, and will bring the rule in line with the current ARCI list with the exception of some provisos in the comments section that the Board's Equine Medical Director has reworded. The special notations are intended to give the Board leeway for Class "A" penalties that could be incidental or dietary exposures. The notations state that if the Board, the Board of stewards, the hearing officer, or the administrative law judge determines that the finding of [the drug substance] or its metabolites was unintentional and not based upon an attempt to affect the outcome or a race, they may elect to assign a Class "B" penalty. Drugs that include a notation are: cobalt, cocaine, methamphetamine, morphine, ractopamine, zilpaterol.

BACKGROUND

Business and Professions Code section 19580 provides that the Board shall adopt regulations to establish policies, guidelines and penalties relating to equine medication to preserve and enhance the integrity of horse racing in this state. Section 19581 of the Business and Professions Code states that no substance of any kind shall be administered by any means to a horse after it has been entered to race in a horse race, unless the Board has, by regulation, specifically authorized the use of the substance and the quantity and composition thereof. Business and Professions Code section 19582 provides that violations of Business and Professions Code section 19581, as determined by the Board, are punishable in regulations adopted by the Board, and that the Board may classify violations based upon each class of prohibited drug substances, prior violations within the previous

three years and prior violations within the violator's lifetime. Board Rule 1843, Medication, Drugs and Other Substances, provides that no horse participating in a race shall carry in its body any drug substance or its metabolites or analogues, foreign to the horse except as hereinafter expressly provided. No drug substance shall be administered to a horse which is entered to compete in a race to be run in this state except for approved and authorized drug substances as provided in these rules.

RECOMMENDATION

This item is presented for Committee discussion and action.

CALIFORNIA HORSE RACING BOARD
TITLE 4. CALIFORNIA CODE OF REGULATIONS
ARTICLE 15. VETERINARY PRACTICES
PROPOSED AMENDMENT OF
RULE 1843.2. CLASSIFICATION OF DRUG SUBSTANCES

Medication, Safety and Welfare Committee
April 18, 2018

1843.2. Classification of Drug Substances.

The Board, the board of stewards, the hearing officer, or the administrative law judge, when adjudicating a hearing for a violation of Business and Professions Code section 19581, shall consider the classification of the substance as referenced in the California Horse Racing Board (CHRB) Classification of Foreign Substances, Alphabetical Substances List (New 03/18) ~~Penalty Categories Listing by Classification (Revised 04/15)~~, hereby incorporated by reference, which is based on the Association of Racing Commissioners International (ARCI) Uniform Classification Guidelines for Foreign Substances (~~12/14~~01/18), as modified by the Board.

Authority: Sections 19580, 19581 and 19582, Business and Professions Code.

Reference: Sections 19580, 19581 and 19582, Business and Professions Code.

CHRB 1843.2 CLASSIFICATION OF FOREIGN SUBSTANCES

ALPHABETICAL SUBSTANCE LIST

1843.2. Classification of Drug Substances.

The Board, the board of stewards, the hearing officer, or the administrative law judge, when adjudicating a hearing for a violation of Business and Professions Code section 19581, shall consider the classification of the substance as referenced in the California Horse Racing Board (CHRB) Classification of Foreign Substances, Alphabetical Substances List (New 03/18), hereby incorporated by reference, which is based on the Association of Racing Commissioners International (ARCI) Uniform Classification Guidelines for Foreign Substances (01/18), as modified by the Board.

Authority: Sections 19580, 19581 and 19582, Business and Professions Code.

Reference: Sections 19580, 19581 and 19582, Business and Professions Code.

CHRB CLASSIFICATION OF FOREIGN SUBSTANCES

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
2-Aminoheptane	*Tuamine*	4	B	
3,4-methylenedioxypyprovalerone	*MDPV, "bath salts"*	1	A	
3-Methoxytyramine	*3-MT*	2	A	
Acebutolol	*Sectral*	3	B	
Acecarbromal		2	A	
Acenocoumarol		5	C	
Acepromazine	*Atrovet, Notensil, PromAce®*	3	B	
Acetaminophen (Paracetamol)	*Tylenol, Tempra, etc.*	4	C	
Acetanilid		4	B	
Acetazolamide	*Diamox, Vetamox*	4	C	
Acetophenazine	*Tindal*	2	A	
Acetophenetidin (Phenacetin)		4	B	
Acetylsalicylic acid (Aspirin)		4	C	
Alclometasone	*Aclovate*	4	C	
Adinazolam		2	A	
Adrenochrome monosemicarbazone salicylate		4	B	

CHRB CLASSIFICATION OF FOREIGN SUBSTANCES

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Albuterol (Salbutamol)	*Proventil, Ventolin*	3	B	
Alclofenac		2	B	
Alcuronium	*Alloferin*	2	A	
Aldosterone	*Aldocortin, Electrocortin*	4	B	
Alfentanil	*Alfenta*	1	A	
Almotriptan	*Axert*	3	A	
Alphaprodine	*Nisentil*	2	A	
Alpidem	*Anaxyl*	2	A	
Alprazolam	*Xanax*	2	A	
Alprenolol		2	A	
Althesin	*Saffan*	2	A	
Altrenogest	*Regumate*	4	C	
Ambenonium	*Mytelase, Myeuran*	3	B	
Ambroxol	*Ambril, etc.*	4	B	
Amcinonide	*Cyclocort*	4	C	
Amiloride	*Moduretic; Midamor*	4	B	
Aminocaproic acid	*Amicar, Caprocid*	4	C	
Amiodarone		4	B	
Aminophylline	*Aminophyllin, etc.*	3	B	

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Aminopyrine		4	B	
Aminorex	*Aminoxafen, Aminoxaphen, Apiquel, McN-742, Menocil*	1	A	
Amisometradine	*Rolictron*	4	B	
Amisulpride	*Solian*	2	A	
Amitraz	*Mitaban*	3	B	
Amitriptyline	*Elavil, Amitril, Endep*	2	A	
Amlodipine	*Ammivin, Norvasc*	3	B	
Amobarbital	*Amytal*	2	A	
Amoxapine	*Asendin*	2	A	
Amperozide		2	A	
Amphetamine		1	A	
Amrinone		4	B	
Amyl nitrite		2	A	
Anileridine	*Leritine*	1	A	
Anilopam	*Anisine*	2	A	
Anisindione		5	D	
Anisotropine	*Valpin*	4	B	

CHRB CLASSIFICATION OF FOREIGN SUBSTANCES

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Antipyrine		4	B	
Apazone (Azapropazone)	*Rheumox*	4	B	
Apomorphine		1	A	
Aprindine		4	B	
Aprobarbital	*Alurate*	2	A	
Arecoline		3	A	
Arformoterol		3	B	
Articaine	*Septocaine; Ultracaine,*	2	B	
	etc.			
Atenolol	*Tenormin*	3	B	
Atipamazole		2	B	
Atomoxetine	*Strattera*	2	A	
Atracurium	*Tracrium*	2	A	
Atropine		3	B	
Azacylonol	*Frenque*	2	A	
Azaperone	*Stresnil, Suicalm, Fentaz (with Fentanyl)*	2	A	
Baclofen	*Lioresal*	4	B	
Barbital	*Veronal*	2	A	
Barbiturates		2	A	

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Beclomethasone	*Propaderm*	4	C	
Bemegride	*Megimide, Mikedimide*	2	A	
Benazepril	*Lotrel, Lotensin*	3	A	
Bendroflumethiazide	*Naturetin*	4	B	
Benoxaprofen		2	B	
Benoxinate	*Dorsacaine*	4	C	
Benperidol	*Anquil*	2	A	
Bentazepam	*Tiadipona*	2	A	
Benzactizine	*Deprol, Bronchodilett en*	2	A	
Benzocaine		4	B	
Benzoctamine		2	A	
Benzodiazepines		2	A	
Benzonatate	*Tessalon Perles, Zonatuss*	2	A	
Benzphetamine	*Didrex*	2	A	
Benzthiazide		4	B	
Benztropine	*Cogentin*	2	A	
Benzylpiperazine (BZP)		1	A	
Bepridil	*Bepadin*	4	B	

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Betamethasone	*Betasone, etc*	4	C	
Betaxolol	*Kerlone*	3	B	
Bethanechol	*Urecholine, Duvoid*	4	C	
Bethanidine	*Esbatal*	3	A	
Biperiden	*Akineton*	3	A	
Biriperone		2	A	
Bisoprolol	*Zebeta, Bisobloc, etc.*	3	B	
Bitolterol	*Effectin*	3	A	
Bolasterone		3	A	
Boldenone	*Equipoise*	3	B	
Boldione		3	A	
Botulism toxin	*Botox*	1	A	
Bretylium	*Bretylol*	3	B	
Brimonidine	*Alphagan*	2	A	
Bromazepam	*Lexotan, Lectopam*	2	A	
Bromfenac	*Duract*	3	A	
Bromhexine	*Oletor, etc.*	4	B	
Bromisovalum	*Diffucord, etc.*	2	A	
Bromocriptine	*Parlodel*	2	A	
Bromodiphenhydramine		3	B	

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Bromperidol	*Bromidol*	2	A	
Brompheniramine	*Dimetane, Disomer*	3	B	
Brotizolam	*Brotocol*	2	A	
Budesonide	*Pulmacort, Rhinocort*	4	C	
Bufexamac		3	A	
Bumetanide	*Bumex*	3	B	
Bupivacaine	*Marcaine*	2	A	
Buprenorphine	*Temgesic*	2	A	
Bupropion	*Wellbutrin*	2	A	
Buspirone	*Buspar*	2	A	
Butabarbital (Secbutobarbitone)	*Butacaps, Butasol, etc.*	2	A	
Butacaine	*Butyn*	2	A	
Butalbital (Talbutal)	*Fiorinal*	2	A	
Butamben (butyl aminobenzoate)	*Butesin*	4	C	
Butanilicaine	*Hostacain*	2	A	
Butaperazine	*Repoise*	2	A	
Butoctamide	*Listomin*	2	A	
Butorphanol	*Stadol, Torbugesic*	3	B	
Butoxycaine	*Stadacain*	4	B	
N-Butylscopolamine		4	C	
Caffeine		2	B	

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Calusterone	*Methosorb*	3	A	
Camazepam	*Paxor*	2	A	
Camphor		4	C	
Candesartan	*Atcand*	3	B	
Capsaicin		2	B	
Captodiame	*Covatine*	2	A	
Captopril	*Capolen*	3	B	
Carazolol	*Carbacel, Conducton*	3	A	
Carbachol	*Lentin, Doryl*	3	B	
Carbamezapine	*Tegretol*	3	B	
Carbazochrome		4	B	
Carbidopa + levodopa	*Sinemet*	2	A	
Carbinoxamine	*Clistin*	3	B	
Carbromol	*Mifudorm*	2	A	
Carfentanil		1	A	
Carisoprodol	*Rela, Soma*	2	B	
Carphenazine	*Proketazine*	2	A	
Carprofen	*Rimadyl*	4	B	
Carteolol	*Cartrol*	3	B	
Carticaine (see articaine)	*Septocaine; Ultracaine, etc.*	2	B	
Carvedilol	*Coreg*	3	B	

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Cathinone	*khat, kat, qat, quat, chat, catha, Abyssinian tea, African tea*	1	A	
Celecoxib	*Celebrex*	3	B	
Cetirizine	*Zyrtec*	4	C	
Chloral betaine	*Beta-Chlor*	2	A	
Chloral hydrate	*Nactec, Oridrate, etc.*	2	A	
Chloraldehyde (chloral)		2	A	
Chloralose (Alpha-Chloralose)		2	A	
Chlordiazepoxide	*Librium*	2	A	
Chlorhexidol		2	A	
Chlormerodrin	*Neohydrin*	4	B	
Chlormezanone	*Trancopal*	2	A	
Chloroform		2	A	
Chlorophenesin	*Maolate*	4	C	
Chloroprocaine	*Nesacaine*	2	A	
Chloroquine	*Avloclor*	4	C	
Chlorothiazide	*Diuril*	4	B	
Chlorpheniramine	*Chlortriemton, etc.*	4	B	
Chlorproethazine	*Newiplege*	2	A	

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Chlorpromazine	*Thorazine, Largactil*	1	A	
Chlorprothixene	*Taractan*	2	A	
Chlorthalidone	*Hydroton*	4	B	
Chlorzoxazone	*Paraflex*	4	B	
Ciclesonide		4	C	
Cilostazol	*Pletal*	4	B	
Cimeterol		3	A	
Cimetidine	*Tagamet*	5	D	
Cinchocaine	*Nupercaine*	2	B	
Citalopram	*Celex*	2	A	
Clanobutin		4	B	
Clemastine	*Tavist*	3	B	
Clenbuterol	*Ventipulmin*	3	B	
Clibucaine	*Batrax*	2	A	
Clidinium	*Quarezan, Clindex, etc.*	3	B	
Clobazam	*Urbanyl*	2	A	
Clobetasol	*Temovate*	4	C	
Clocapramine		2	A	
Clocortolone	*Cloderm*	4	C	
Clofenamide		4	B	
Clomethiazole (Chlormethiazole)		2	A	
Clomipramine	*Anafranil*	2	A	

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Clomethiazole (Chlormethiazole)		2	A	
Clomipramine	*Anafranil*	2	A	
Clonazepam	*Klonopin*	2	A	
Clonidine	*Catapres*	3	B	
Clorazepate	*Tranxene*	2	A	
Clormecaine	*Placacid*	2	A	
Clostebol		3	A	
Clothiapine	*Entermin*	2	A	
Clotiazepam	*Trecalmo, Rize*	2	A	
Cloxazolam	*Enadel, Sepazon, Tolestan*	2	A	
Clozapine	*Clozaril, Leponex*	2	A	
Cobalt (in excess of 25.0 ppb)		4	C	For cobalt concentrations in excess of 25.0 parts per billion (ppb) of blood serum or plasma but at or below 50.0 parts per billion (ppb) of blood serum or plasma or below.
Cobalt (in excess of 50.0 ppb)		3	B	For cobalt concentrations in excess of 50.0 parts per billion (ppb) of blood serum or plasma.
a-Cobratoxin		1	A	

CHRB CLASSIFICATION OF FOREIGN SUBSTANCES

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Cocaine		1	A	If the Board, the board of stewards, the hearing officer, or the administrative law judge determines that the finding of cocaine or its metabolites was unintentional and not based upon an attempt to affect the outcome of a race, they may elect to assign a Class B penalty
Codeine		1	A	
Colchicine		4	B	
Conorphone		2	A	
Corticaine	*Ultracain*	2	A	
Cortisone	*Cortone, etc.*	4	C	
Cromolyn	*Intel*	5	D	
Crotetamide		2	A	
Cyamemazine	*Tercian*	2	A	
Cyclandelate	*Cyclospasmol*	3	A	
Cyclizine	*Merazine*	3	B	
Cyclobarbital	*Phanodorm*	2	A	
Cyclobenzaprine	*Flexeril*	4	B	
Cyclomethycaine	*Surfacaine*	4	C	
Cyclothiazide	*Anhydron, Renazide*	4	B	
Cycrimine	*Pagitane*	3	B	
Cyproheptadine	*Periactin*	3	B	
Danazol	*Danocrine*	3	B	
Dantrolene	*Dantrium*	4	C	

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Darbepoetin	*Aranesp*	1	A	
Decamethonium	*Syncurine*	2	A	
Dehydrochloromethyltestosterone		3	A	
Dembroxol (Dembrexine)	*Sputolysin*	4	C	
Demoxepam		2	A	
Deoxycorticosterone	*Percortin, DOCA, Descotone, Dorcostrin*	4	C	
Deracoxib	*Deremaxx*	3	B	
Dermorphin		1	A	
Desipramine	*Norpromine, Pertofrane*	2	A	
Desonide	*Des Owen*	4	C	
Desoximetasone	*Topicort*	4	C	
Desoxymethyltestosterone		3	A	
Detomidine	*Dormosedan*	3	B	
Dexamethasone	*Azium, etc.*	4	C	
Dextromethorphan		4	B	
Dextromoramide	*Palfium, Narcolo*	1	A	
Dextropropoxyphene	*Darvon*	3	B	
Dezocine	*Dalgan*	2	A	

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Diamorphine		1	A	
Diazepam	*Valium*	3	B	
Diazoxide	*Proglycem*	3	B	
Dibucaine	*Nupercainal, Cinchocaine*	2	B	
Dichloralphenazone	*Febenol, Isocom*	2	A	
Dichlorphenamide	*Daramide*	4	C	
Diclofenac	*Voltaren, Voltarol*	4	C	
Dicumarol	*Dicumarol*	5	D	
Diethylpropion	*Tepanil, etc.*	2	A	
Diethylthiambutene	*Themalon*	2	A	
Diflorasone	*Florone, Maxiflor*	4	C	
Diflucortolone	*Flu-Cortinest, etc.*	4	C	
Diflunisal		3	B	
Digitoxin	*Crystodigin*	4	B	
Digoxin	*Lanoxin*	4	B	
Dihydrocodeine	*Parcodin*	2	A	
Dihydroergotamine		4	B	
Dilorazepam	*Briantum*	2	A	
Diltiazem	*Cardizem*	4	B	
Dimefline		3	A	

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Dimethisoquin	*Quotane*	4	B	
Dimethylsulfoxide (DMSO)	*Domoso*	4	C	
Diphenadione		5	C	
Diphenhydramine	*Benadryl*	3	B	
Diphenoxylate	*Difenoxin, Lomotil*	4	B	
Diprenorphine	*M50/50*	2	A	
Dipyridamole	*Persantine*	3	B	
Dipyrone	*Novin, Methampyrone*	4	B	
Disopyramide	*Norpace*	4	B	
Divalproex	*Depakote*	3	A	
Dixyrazine	*Esucos*	2	A	
Dobutamine	*Dobutrex*	3	B	
Dopamine	*Intropin*	2	A	
Donepezil	*Aricept*	1	A	
Doxacurium	*Nuromax*	2	A	
Doxapram	*Dopram*	2	A	
Doxazosin		3	A	
Doxefazepam	*Doxans*	2	A	
Doxepin	*Adapin, Sinequan*	2	A	
Doxylamine	*Decapryn*	3	B	
Dromostanolone	*Drolban*	3	B	

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Droperidol	*Inapsine, Droleptan, Innovar-Vet (with Fentanyl)*	2	A	
Duloxetine		2	A	
Dyclonine	*Dyclone*	4	C	
Dyphylline		3	B	
Edrophonium	*Tensilon*	3	B	
Eletripan	*Relpax*	3	A	
Eltenac		4	B	
Enalapril (metabolite enaloprilat)	*Vasotec*	3	A	
Enciprazine		2	A	
Endorphins		1	A	
Enkephalins		1	A	
Ephedrine		2	A	
Epibatidine		2	A	
Epinephrine		2	A	
Ergoloid mesylates (dihydroergocornine mesylate, dihydroergocristine mesylate, and dihydroergocryptine mesylate)		2	A	
Ergonovine	*Ergotrate*	4	C	

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Ergotamine	*Gynergen, Cafergot, etc.*	4	B	
Erthrityl tetranitrate	*Cardilate*	3	A	
Erythropoietin (EPO)	*Epogen, Procrit, etc.*	1	A	
Esmolol	*Brevibloc*	3	B	
Esomeprazole	*Nexium*	5	D	
Estazolam	*Domnamid, Eurodin, Nuctalon*	2	A	
Eszopiclone		2	A	
Etamiphylline		3	B	
Etanercept	*Enbrel*	4	B	
Ethacrynic acid	*Edecrin*	3	B	
Ethamivan		2	A	
Ethanol		2	A	
Ethchlorvynol	*Placidyl*	2	A	
Ethinamate	*Valmid*	2	A	
Ethoheptazine	*Zactane*	2	A	
Ethopropazine	*Parsidol*	2	A	
Ethosuximide	*Zarontin*	3	A	
Ethotoin	*Peganone*	4	B	
Ethoxzolamide	*Cardrase, Ethamide*	4	C	
Ethylaminobenzoate (Benzocaine)	*Semets, etc.*	4	C	

CHRB CLASSIFICATION OF FOREIGN SUBSTANCES

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Ethylestrenol	*Maxibolin, Organon*	3	B	
Ethylisobutrazine	*Diquel*	2	A	
Ethylmorphine	*Dionin*	1	A	
Ethylnorepinephrine	*Bronkephrine*	3	A	
Ethylphenidate		1	A	
Etidocaine	*Duranest*	2	A	
Etifoxin	*Stresam*	2	A	
Etizolam	*Depas, Pasaden*	2	A	
Etodolac	*Lodine*	3	B	
Etodroxizine	*Indunox*	2	A	
Etomidate		2	A	
Etorphine HCl	*M99*	1	A	
Famotidine	*Gaster, etc.*	5	D	
Felbamate	*Felbatol*	3	B	
Felodipine	*Plendil*	4	B	
Fenarbamate	*Tymium*	2	A	
Fenbufen	*Cincopal*	3	B	
Fenclozic acid	*Myalex*	2	B	
Fenfluramine	*Pondimin*	2	A	
Fenoldopam	*Corlopam*	3	B	
Fenoprofen	*Nalfon*	3	B	
Fenoterol	*Berotec*	3	B	

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Fenspiride	*Respiride, Respan, etc*	3	B	
Fentanyl	*Sublimaze*	1	A	
Fentiazac		3	B	
Fexofenadine	*Allegra*	4	C	
Firocoxib		4	C	
Flecainide	*Idalon*	4	B	
Floctafenine	*Idalon, Idarac*	4	B	
Fluanisone	*Sedalande*	2	A	
Fludiazepam	*Erispam*	2	A	
Fludrocortisone	*Alforone, etc.*	4	C	
Flufenamic acid		3	B	
Flumethasone	*Flucort, etc.*	4	C	
Flumethiazide	*Ademol*	4	B	
Flunarizine	*Sibelium*	4	B	
Flunisolide	*Bronilide, etc.*	4	C	
Flunitrazepam	*Rohypnol, Narcozep, Darkene, Hypnodorm*	2	A	
Flunixin	*Banamine*	4	C*	
Fluocinolone	*Synalar*	4	C	
Fluocinonide	*Licon, Lidex*	4	C	

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Fluopromazine	*Psyquil, Siquil*	2	A	
Fluoresone	*Caducid*	2	A	
Fluorometholone	*FML*	4	C	
Fluoroprednisolone		4	B	
Fluoxetine	*Prozac*	2	A	
Fluoxymesterone	*Halotestin*	3	B	
Flupenthixol	*Depixol, Fluanxol*	2	A	
Fluphenazine	*Prolixin, Permitil, Anatensol, etc.*	2	B	
Flupirtine	*Katadolone*	3	A	
Fluprednisolone	*Alphadrol*	4	C	
Flurandrenolide	*Cordran*	4	C	
Flurazepam	*Dalmane*	2	A	
Flurbiprofen	*Froben*	3	B	
Fluspirilene	*Imap, Redeptin*	2	A	
Fluticasone	*Flixonase, Flutide*	4	C	
Flutoprazepam	*Restas*	2	A	
Fluvoxamine	*Dumirox, Faverin, etc.*	2	A	
Formebolone		3	A	

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Formoterol	*Altram*	3	B	
Fosinopril	*Monopril*	3	A	
Fosphenytoin	*Cerebyx*	3	B	
Furazabol		3	A	
Furosemide	*Lasix*	N/A		
Gabapentin	*Neurontin*	3	B	
Galantamine	*Reminyl*	2	A	
Gallamine	*Flaxedil*	2	A	
Gamma Aminobutryic Acid (GABA)	*Carolina Gold*	3	B	
Gepirone		2	A	
Gestrinone		3	A	
Glutethimide	*Doriden*	2	A	
Glycopyrrolate	*Robinul*	4	C	
Guaifenesin (glycerol guiacolate)	*Gecolate*	4	C	
Guanadrel	*Hylorel*	3	A	
Guanethidine	*Ismelin*	3	A	
Guanabenz	*Wytensin*	3	B	
Halazepam	*Paxipam*	2	A	
Halcinonide	*Halog*	4	C	
Halobetasol	*Ultravate*	4	C	
Haloperidol	*Haldol*	2	A	
Haloxazolam	*Somelin*	2	A	
Hemoglobin glutamers	*Oxyglobin* *Hemopure*	2	A	

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Heptaminol	*Corofundol*	3	B	
Heroin		1	A	
Hexafluorenium	*Myalexen*	2	A	
Hexobarbital	*Evipal*	2	A	
Hexocyclium	*Tral*	4	B	
Hexylcaine	*Cyclaine*	2	B	
Homatropine	*Homapin*	3	B	
Homophenazine	*Pelvichthol*	2	A	
Hydralazine	*Apresoline*	3	B	
Hydrochlorthiazide	*Hydrodiuril*	4	B	
Hydrocodone (dihydrocodienone)	*Hycodan*	1	A	
Hydrocortisone (Cortisol)	*Cortef, etc.*	4	C	
Hydroflumethiazide	*Saluron*	4	B	
Hydromorphone	*Dilaudid*	1	A	
Hydroxyamphetamine	*Paradrine*	1	A	
4-Hydroxytestosterone		3	B	
Hydroxyzine	*Atarax*	2	B	
Ibomal	*Noctal*	2	A	
Ibuprofen	*Motrin, Advil, Nurpin, etc.*	4	C	
Ibutilide	*Corvert*	3	B	
Iloprost	*Ventavis*	3	A	

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Imipramine	*Imavate, Presamine, Tofranil*	2	A	
Indomethacin	*Indocin*	3	B	
Infliximab	*Remicade*	4	B	
Ipratropium		3	B	
Irbesarten	*Avapro*	3	A	
Isapirone		2	A	
Isocarboxazid	*Marplan*	2	A	
Isoetharine	*Bronkosol*	3	B	
Isoflupredone	*Predef 2x*	4	C	
Isomethadone		2	A	
Isometheptene	*Octin, Octon*	4	B	
Isopropamide	*Darbid*	4	B	
Isoproterenol	*Isoprel*	2	A	
Isosorbide dinitrate	*Isordil*	3	B	
Isoxicam	*Maxicam*	2	B	
Isoxsuprine	*Vasodilan*	4	D	
Isradipine	*DynaCirc*	4	B	
Kebuzone		3	B	
Ketamine	*Ketalar, Ketaset, Vetalar*	2	B	

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Ketazolam	*Anxon, Laftram, Solatran, Loftran*	2	A	
Ketoprofen	*Orudis*	4	C*	
Ketorolac	*Toradol*	3	A	
Labetalol	*Normodyne*	3	B	
Lamotrigine	*Lamictal*	3	A	
Lansoprazole		5	D	
Lenperone	*Elanone-V*	2	A	
Letosteine	*Viscotiol, Visiotal*	4	B	
Letrozole		3	A	
Levamisole		2	B	
Levobunolol	*Betagan*	3	B	
Levomethorphan		2	A	
Levorphanol	*Levo-Dremoran*	1	A	
Lidocaine	*Xylocaine*	2	B	
Lisinopril	*Prinivil, Zestril*	3	A	
Lithium	*Lithizine, Duralith, etc.*	2	A	
Lobeline		2	A	
Lofentanil		1	A	

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Loflazepate, Ethyl	*Victan*	2	A	
Loperamide	*Imodium*	3	B	
Loprazolam	*Dormonort, Havlane*	2	A	
Loratidine	*Claritin*	4	C	
Lorazepam	*Ativan*	2	A	
Lormetazepam	*Noctamid*	2	A	
Losartan	*Hyzaar*	3	B	
Loxapine	*Laxitane*	2	A	
Mabuterol		3	A	
Maprotiline	*Ludiomil*	2	A	
Mazindol	*Sanorex*	1	A	
Mebutamate	*Axiten, Dormate, Capla*	2	A	
Mecamylamine	*Inversine*	3	B	
Meclizine	*Antivert, Bonine*	3	B	
Meclofenamic acid	*Arquel*	4	C	
Meclofenoxate	*Lucidiril, etc.*	2	A	
Medazepam	*Nobrium, etc.*	2	A	
Medetomidine	*Domitor*	3	B	
Medrysone	*Medriusar, etc.*	4	C	
Mefenamic acid	*Ponstel*	3	B	

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Meldonium	*Mildronate, et al*	1	A	
Meloxicam	*Mobic*	4	B	
Melperone	*Eunerpan*	2	A	
Memantine	*Namenda*	2	A	
Meparfynol	*Oblivon*	2	A	
Mepazine	*Pacatal*	2	A	
Mepenzolate	*Cantil*	3	B	
Meperidine	*Demerol*	1	A	
Mephenesin	*Tolserol*	4	B	
Mephenoxalone	*Control, etc.*	2	A	
Mephentermine	*Wyamine*	1	A	
Mephenytoin	*Mesantoin*	2	A	
Mephobarbital (Methylphenobarbital)	*Mebaral*	2	A	
Mepivacaine	*Carbocaine*	2	B	
Meprobamate	*Equanil, Miltown*	2	A	
Meralluride	*Mercuhydrin*	4	B	
Merbaphen	*Novasural*	4	B	
Mercaptomerin	*Thiomerin*	4	B	
Mercumatilin	*Cumertilin*	4	B	
Mersalyl	*Salyrgan*	4	B	
Mesalamine	*Asacol*	5	C	

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Mesoridazine	*Serentil*	2	A	
Mestanolone		3	A	
Mesterolone		3	A	
Metaclazepam	*Talis*	2	A	
Metaproterenol	*Alupent, Metaprel*	3	B	
Metaraminol	*Aramine*	1	A	
Metaxalone	*Skelaxin*	4	B	
Metazocine		2	A	
Metformin		2	B	
Methenolone	*Primobolan*	3	A	
Methacholine		3	A	
Methadone	*Dolophine*	1	A	
Methamphetamine	*Desoxyn*	1	A	If the Board, the board of stewards, the hearing officer, or the administrative law judge determines that the finding of methamphetamine or its metabolites was unintentional and not based upon an attempt to affect the outcome of a race, or if testing shows only the presence of levo-methamphetamine in the sample, they may elect to assign a Class B penalty. Recommended Penalty B if testing can prove presence of only levo-methamphetamine is present in sample.
Methandrostenolone	*Dianobal*	3	A	
Methandriol (Methylandrostenediol)	*Probolic*	3	A	
Methantheline	*Banthine*	3	B	
Methapyrilene	*Histadyl, etc.*	3	B	

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Methaqualone	*Quaalude*	1	A	
Metharbital	*Gemonil*	2	A	
Methasterone		3	A	
Methazolamide	*Naptazane*	4	C	
Methcathinone		1	A	
Methdilazine	*Tacaryl*	3	B	
Methixene	*Trest*	3	A	
Methocarbamol	*Robaxin*	4	C	
Methohexital	*Brevital*	2	A	
Methotrexate	*Folex, Nexate, etc.*	4	B	
Methotrimeprazine	*Levoprome, Neurocil, etc.*	2	A	
Methoxamine	*Vasoxyl*	3	A	
Methoxyphenamine	*Orthoxide*	3	A	
Methscopolamine	*Pamine*	4	B	
Methsuximide	*Celontin*	4	B	
Methylatropine		3	B	
Methyclothiazide	*Enduron*	4	B	
Methyldienolone		3	A	
Methyldopa	*Aldomet*	3	A	
Methylhexanamine (Methylhexaneamine)	*Geranamine*	1	A	
Methylergonovine	*Methergine*	4	C	

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Methylnortestosterone (Trestolone)		3	A	
Methylphenidate	*Ritalin*	1	A	
Methylprednisolone	*Medrol*	4	C	
Methyltestosterone	*Metandren*	3	B	
Methyl-1-testosterone		3	A	
Methyprylon	*Noludar*	2	A	
Methysergide	*Sansert*	4	B	
Metiamide		4	B	
Metoclopramide	*Reglan*	4	C	
Metocurine	*Metubine*	2	A	
Metolazone		3	B	
Metomidate	*Hypnodil*	2	A	
Metopon (methydihydromorphinone)		1	A	
Metoprolol	*Lopressor*	3	B	
Mexazolam	*Melex*	2	A	
Mexiletine	*Mexitil*	4	B	
Mibefradil	*Posicor*	3	B	
Mibolerone		3	B	
Midazolam	*Versed*	3	B	
Midodrine	*Pro-Amiline*	3	B	
Milrinon		4	B	
Minoxidil	*Loniten*	3	B	
Mirtazepine	*Remeron*	2	A	

CHRB CLASSIFICATION OF FOREIGN SUBSTANCES

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Misoprostol	*Cytotec*	5	D	
Mitragynine	*Kratom*	1	A	
Mivacurium	*Mivacron*	2	A	
Modafinil	*Provigil*	2	A	
Moexipril (metabolite, moexiprilat)	*Uniretic*	3	B	
Molindone	*Moban*	2	A	
Mometasone	*Elocon*	4	C	
Montelukast	*Singulair*	4	C	
Moperone	*Luvatren*	2	A	
Morphine		1	A6	If the Board, the board of stewards, the hearing officer, or the administrative law judge determines that the finding of morphine was unintentional and not based upon an attempt to affect the outcome of a race, the Stewards or Board May elect to assign a Class B penalty.
Mosaprimine		2	A	
Muscarine		3	A	
myo-inositol trispyrophosphate (ITPP)		1	A	
Nabumetone	*Anthraxan, Relafen,*	2	A	
Nadol	*Corgard*	3	B	
Naepaine	*Amylsine*	2	A	
Nalbuphine	*Nubain*	2	A	

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Nalorphine	*Nalline,*	2	A	
Naloxone	*Narcan*	3	B	
Naltrexone	*Revia*	3	B	
	Nandrolin,			
Naphazoline	*Privine*	4	B	
Naproxen	*Equiproxen,*	4	C	
Naratriptan	*Amerge*	3	B	
Nebivolol		3	A	
Nedocromil	*Tilade*	5	D	
Nefazodone	*Serzone*	2	A	
Nefopam		3	A	
Neostigmine	*Prostigmine*	3	B	
Nicardipine	*Cardine*	4	B	
Nifedipine	*Procardia*	4	B	
Niflumic acid	*Nifluril*	3	B	
Nikethamide	*Coramine*	1	A	
Nimesulide		3	B	
Nimetazepam	*Erimin*	2	A	
Nimodipine	*Nemotop*	4	B	

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Nitrazepam	*Mogadon*	2	A	
Nitroglycerin		2	B	
Nizatidine	*Axid*	5	D	
19-Norandrostenediol		3	B	
19-Norandrostenedione		3	B	
Norbolethone/Norboletone		3	A	
Norclostebol		3	A	
Nordiazepam	*Calmday, Nordaz, etc.*	2	A	
Norepinephrine		2	A	
Norethandrolone		3	A	
Nortestosterone		3	B	
Nortriptyline	*Aventyl, Pamelor*	2	A	
Nylidrine	*Arlidin*	3	A	
Olanzepine	*Zyprexa*	2	A	
Olmesartan	*Benicar*	3	A	
Olsalazine	*Dipentum*	5	C	
Omeprazole	*Prilosec, Losec*	5	D	
Orphenadrine	*Norlfex*	4	B	
Oxabolone		3	A	
Oxandrolone	*Anavar*	3	B	
Oxaprozin	*Daypro, Deflam*	4	B	

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Oxazepam	*Serax*	2	A	
Oxazolam	*Serenal*	2	A	
Oxcarbazepine	*Trileptal*	3	A	
Oxilofrine (hydroxyephedrine)		2	A	
Oxprenolol	*Trasicor*	3	A	
Oxycodone	*Percodan*	1	A	
Oxymesterone		3	A	
Oxymetazoline	*Afrin*	4	B	
Oxymetholone	*Adroyd, Anadrol*	3	B	
Oxymorphone	*Numorphan*	1	A	
Oxyperitine	*Forit, Integrin*	2	A	
Oxyphenbutazone	*Tandearil*	4	C	
Oxyphencyclimine	*Daricon*	4	B	
Oxyphenonium	*Antrenyl*	4	B	
Paliperidone		2	A	
Pancuronium	*Pavulon*	2	A	
Pantoprazole	*Protonix*	5	D	
Papaverine	*Pavagen, etc.*	3	A	
Paraldehyde	*Paral*	2	A	
Paramethadione	*Paradione*	3	A	
Paramethasone	*Haldrone*	4	C	
Pargyline	*Eutonyl*	3	A	
Paroxetine	*Paxil, Seroxat*	2	A	

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Pemoline	*Cylert*	1	A	
Penbutolol	*Levatol*	3	B	
Penfluridol	*Cyperon*	2	A	
Pentaerythritol tetranitrate	*Duotrate*	3	A	
Pentazocine	*Talwin*	3	B	
Pentobarbital	*Nembutal*	2	A	
Pentoxyfylline	*Trental, Vazofirin*	4	D	
Pentylenetetrazol	*Metrazol, Nioric*	1	A	
Perazine	*Taxilan*	2	A	
Perfluorodecolin		2	A	
Perfluorodecahydronophthalene		2	A	
Perfluorooctylbromide		2	A	
Perfluorotripropylamine		2	A	
Perfluorocarbons		2	A	
Pergolide	*Permax*	3	B	
Periciazine	*Alodept, etc.*	2	A	
Perindopril	*Biprel*	3	A	
Perlapine	*Hypnodin*	2	A	
Perphenazine	*Trilafon*	2	A	
Phenacemide	*Phenurone*	4	B	
Phenaglycodol	*Acalo, Alcamid, etc.*	2	A	

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Phenazocine	*Narphen*	1	A	
Phencyclidine (PCP)	*Sernylan*	1	A	
Phendimetrazine	*Bontril, etc.*	1	A	
Phenelzine	*Nardelzine, Nardil*	2	A	
Phenindione	*Hedulin*	5	D	
Phenmetrazine	*Preludin*	1	A	
Phenobarbital	*Luminal*	2	A	
Phenoxybenzamine	*Dibenzyline*	3	B	
Phenprocoumon	*Liquamar*	5	D	
Phensuximide	*Milontin*	4	B	
Phentermine	*Iomamin*	2	A	
Phentolamine	*Regitine*	3	B	
Phenylbutazone	*Butazolidin*	4	C*	
Phenylephrine	*Isophrin, Neo-Synephrine*	3	B	
Phenylpropanolamine	*Propadrine*	3	B	
Phenytoin	*Dilantin*	4	B	
Physostigmine	*Eserine*	3	A	
Picrotoxin		1	A	
Piminodine	*Alvodine, Cimadon*	2	A	
Pimobendan		2	B	
Pimozide	*Orap*	2	A	

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Pinazepam	*Domar*	2	A	
Pindolol	*Viskin*	3	B	
Pipamperone	*Dipiperon*	2	A	
Pipecuronium	*Arduan*	2	A	
Pipequaline		2	A	
Piperacetazine	*Psymod, Quide*	2	A	
Piperocaine	*Metycaine*	2	A	
Pipotiazine	*Lonseren, Piportil*	2	A	
Pipradrol	*Dataril, Gerondyl, etc.*	2	A	
Piquindone		2	A	
Pirbuterol	*Maxair*	3	B	
Pirenzepine	*Gastrozepin*	5	C	
Piretanide	*Arelix, Tauliz*	3	B	
Piritramide		1	A	
Piroxicam	*Feldene*	4	B	
Polyethylene glycol		5	D	
Polythiazide	*Renese*	4	B	
Pramoxine	*Tronothaine*	4	C	
Prazepam	*Verstran, Centrax*	2	A	
Prazosin	*Minipress*	3	B	

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Spadal Notation
Prednisolone	*Delta-Cortef, etc.*	4	C	
Prednisone	*Meticorten, etc.*	4	C	
Prilocaine	*Citanest*	2	B	
Primidone	*Mysoline*	3	B	
Probenecid		4	C	
Procainamide	*Pronestyl*	4	B	
Procaine		3	B	
Procaterol	*Pro Air*	3	A	
Prochlorperazine	*Darbazine, Compazine*	2	A	
Procyclidine	*Kemadrin*	3	B	
Promazine	*Sparine*	3	B	
Promethazine	*Phenergan*	3	B	
Propafenone	*Rythmol*	4	B	
Propanidid		2	A	
Propantheline	*Pro-Banthine*	3	B	
Proparacaine	*Ophthaine*	4	C	
Propentophylline	*Karsivan*	3	B	
Propiomazine	*Largon*	2	A	
Propionylpromazine	*Tranvet*	2	A	
Propiram		2	A	
Propofol	*Diprivan, Disoprivan*	2	A	

CHRB CLASSIFICATION OF FOREIGN SUBSTANCES

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Propoxycaine	*Ravocaine*	2	A	
Propranolol	*Inderal*	3	B	
Propylhexedrine	*Benzedrex*	4	B	
Prostanazol		3	A	
Prothipendyl	*Dominal*	2	A	
Protokylol	*Ventaire*	3	A	
Protriptyline	*Concordin, Triptil*	2	A	
Proxibarbital	*Axeen, Centralgol*	2	A	
Pseudoephedrine	*Cenafed, Novafed*	3	B	
Pyridostigmine	*Mestinon, Regonol*	3	B	
Pyrilamine	*Neoantergan, Equihist*	3	B	
Pyrithyldione	*Hybersulfan, Sonodor*	2	A	
Quazipam	*Doral*	2	A	
Quetiapine	*Seroquel*	2	A	
Quinbolone		3	A	
Quinapril, Quinaprilat	*Accupril*	3	A	
Quinidine	*Quinidex, Quinicardine*	4	B	
Rabeprazole	*Aciphex*	5	D	
Racemethorphan		2	A	

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Racemorphan		2	A	
Raclopride		2	A	
Ractopamine	*Paylean*	2	A	If the Board, the board of stewards, the hearing officer, or the administrative law judge determines that the finding of ractopamine was unintentional and not based upon an attempt to affect the outcome of a race, they may elect to assign a Class B penalty.
Ramipril, metabolite Ramiprilat	*Altace*	3	A	
Ranitidine	*Zantac*	5	D	
Remifentanil	*Ultiva*	1	A	
Remoxipride	*Roxiam*	2	A	
Reserpine	*Serpasil*	2	B	
Rilmazafone		2	A	
Risperidone		2	A	
Ritanserin		2	A	
Ritodrine	*Yutopar*	3	B	
Rivastigmine	*Exelon*	2	A	
Rizatriptan	*Maxalt*	3	B	
Rocuronium	*Zemuron*	2	A	
Rofecoxib	*Vioxx*	2	B	
Romifidine	*Sedivet*	3	B	
Ropivacaine	*Naropin*	2	A	
Salicylamide		4	C	
Salicylate		4	C	
Salmeterol		3	B	

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Scopolamine (Hyoscine)	*Triptone*	4	C	
Secobarbital (Quinalbarbitone)	*Seconal*	2	A	
Selegiline	*Eldepryl, Jumex, etc.*	2	A	
Sertraline	*Lustral, Zoloft*	2	A	
Sibutramine	*Meridia*	3	B	
Sildenafil	*Viagra*	3	A	
Somatropin	*Nutropin*	2	A	
Somatrem	*Protropin*	2	A	
Sotalol	*Betapace, Sotacor*	3	B	
Spiclomazine		2	A	
Spiperone		2	A	
Spirapril, metabolite Spiraprilat	*Renomax*	3	A	
Spironalactone	*Aldactone*	4	B	
Stanozolol	*Winstrol-V*	3	B	
Stenbolone		3	A	
Strychnine		1	A	
Succinylcholine	*Sucostrin, Quelin, etc.*	2	A	
Sufentanil	*Sufenta*	1	A	
Sulfasalazine	*Azulfidine, Azaline*	4	C	
Sulfondiethylmethane		2	A	

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Sulfonmethane		2	A	
Sulforidazine	*Inofal*	2	A	
Sulindac	*Clinoril*	3	B	
Sulpiride	*Aiglonyl, Sulpitil*	2	A	
Sultopride	*Barnetil*	2	A	
Sumatriptan	*Imitrex*	3	B	
Synthetic cannabis	*Spice, K2, Kronic*	1	A	
Tadalasil	*Cialis*	3	A	
Talbutal	*Lotusate*	2	A	
Tandospirone		2	A	
TCO2		3	B	
Telmisartin	*Micardis*	3	B	
Temazepam	*Restoril*	2	A	
Tenoxicam	*Alganex, etc.*	3	B	
Tepoxalin		3	B	
Terazosin	*Hytrin*	3	A	
Terbutaline	*Brethine, Bricanyl*	3	B	
Terfenadine	*Seldane, Triludan*	4	C	
Testolactone	*Teslac*	3	B	
Testosterone		3	B	
Tetrabenazine	*Nitoman*	2	A	

CHRB CLASSIFICATION OF FOREIGN SUBSTANCES

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Tetracaine	*Pontocaine*	2	A	
Tetrahydrogestrinone		3	A	
Tetrahydrozoline	*Tyzine*	4	B	
Tetrazepam	*Musaril, Myolastin*	2	A	
Thebaine		2	A	
Theobromine		4	B	
Theophylline	*Aqualphyllin, etc.*	3	B	
Thialbarbital	*Kemithal*	2	A	
Thiamylal	*Surital*	2	A	
Thiethylperazine	*Torecan*	2	A	
Thiopental	*Pentothal*	2	A	
Thiopropazate	*Dartal*	2	A	
Thioproperazine	*Majeptil*	2	A	
Thioridazine	*Mellaril*	2	A	
Thiosalicylate		4	B	
Thiothixene	*Navane*	2	A	
Thiphenamil	*Trocinate*	4	B	
Tiapride	*Italprid, Luxoben, etc.*	2	A	
Tiaprofenic acid	*Surgam*	3	B	
Tiletamine	*Component of Telazol*	2	A	
Timiperone	*Tolopelon*	2	A	

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Timolol	*Blocardrin*	3	B	
Tocainide	*Tonocard*	4	B	
Tofisopam	*Grandaxain, Seriel*	2	A	
Tolazoline	*Priscoline*	3	B	
Tolfenamic Acid		4	B	
Tolmetin	*Tolectin*	3	B	
Topirimate	*Topamax*	2	A	
Torsemide (Torasemide)	*Demadex*	3	A	
Tramadol	*Ultram*	2	B	
Trandolapril (and metabolite, trandolaprilat)	*Tarka*	3	B	
Tranexamic acid		4	C	
Tranylcypromine	*Parnate*	2	A	
Trazodone	*Desyrel*	2	A	
Trenbolone	*Finoplix*	3	B	
Tretoquinol	*Inolin*	2	A	
Triamcinolone	*Vetaloq, etc.*	4	C	
Triamterene	*Dyrenium*	4	B	
Triazolam	*Halcion*	2	A	
Tribromethanol		2	A	
Tricaine methanesulfonate	*Finquel*	2	A	
Trichlormethiazide	*Naqua, Naquasone*	4	C	

CHRB CLASSIFICATION OF FOREIGN SUBSTANCES

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Trichloroethanol		2	A	
Tricholoethylene	*Trilene, Trimar*	2	A	
Triclofos	*Triclos*	2	A	
Tridihexethyl	*Pathilon*	4	B	
Trifluomeprazine	*Nortran*	2	A	
Trifluoperazine	*Stelazine*	2	A	
Trifluperidol	*Triperidol*	2	A	
Triflupromazine	*Vetame, Vesprin*	2	A	
Trihexylphenidyl	*Artane*	3	A	
Trimeprazine	*Temaril*	4	B	
Trimethadione	*Tridione*	3	B	
Trimethaphan	*Arfonad*	3	A	
Trimipramine	*Surmontil*	2	A	
Tripelennamine	*PBZ*	3	B	
Triprolidine	*Actidil*	3	B	
Tubocurarine (Curare)	*Metubin*	2	A	
Tybamate	*Benvil, Nospan, etc.*	2	A	
Urethane		2	A	
Valdecoxib		2	B	
Valerenic acid		3	A	
Valnoctamide	*Nirvanyl*	2	A	

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Valsartan	*Diovan*	3	B	
Vardenafil	*Levitra*	3	A	
Vedaprofen		4	B	
Venlafaxine	*Efflexor*	2	A	
Veralipride	*Accional, Veralipril*	2	A	
Verapamil	*Calan, Isoptin*	4	B	
Vercuronium	*Norcuron*	2	A	
Viloxazine	*Catatrol, Vivalan, etc.*	2	A	
Vinbarbital	*Delvinol*	2	A	
Vinylbital	*Optanox, Speda*	2	A	
Warfarin	*Coumadin, Coufarin*	5	D	
Xylazine	*Rompun, Bay Va 1470*	3	B	
Xylometazoline	*Otrivin*	4	B	
Yohimbine		2	B	
Zafirlukast	*Accolate*	4	C	
Zaleplon	*Sonata*	2	A	
Zeranol	*Ralgro*	4	C	
Ziconotide		1	A	
Zileuton	*Zyflo*	4	C	

CHRB CLASSIFICATION OF FOREIGN SUBSTANCES

Drug/Substance	*Trade Name(s)*	Drug Class	Penalty Class	Special Notation
Zilpaterol hydrochloride	*Zilpaterol*	2	A	If the Board, the board of stewards, the hearing officer, or the administrative law judge determines that the finding of Zilpaterol was unintentional and not based upon an attempt to affect the outcome of a race, they may elect to assign a Class B penalty.
Ziprasidone	*Geoden*	2	A	
Zolazepam		2	A	
Zolmitriptan	*Zomig*	3	B	
Zolpidem	*Ambien, Stilnox*	2	A	
Zomepirac	*Zomax*	2	B	
Zonisamide	*Zonegran*	3	B	
Zopiclone	*Imovan*	2	A	
Zotepine	*Lodopin*	2	A	
Zuclopenthixol	*Ciatyl, Cesordinol*	2	A	
Δ-1-androstene-3, 17-diol		3	A	
Δ-1-androstene-3, 17-dione		3	A	
Δ-1-dihydrotestosterone		3	A	

Item 5

STAFF ANALYSIS
DISCUSSION AND ACTION BY THE BOARD REGARDING THE PROPOSED ADDITION OF CHRB RULE 1660.1, DELIVERY OF MEDICAL RECORDS, TO REQUIRE THE TRANSFER OF MEDICAL RECORDS TO HORSES CLAIMED IN A CLAIMING RACE.

Medication, Safety and Welfare Committee Meeting
April 18, 2018

ISSUE

Upon purchase of a horse in a claiming race, the medical record of the horse is not routinely transferred to the new owner. As a result, the horse's pre-existing medical conditions and treatments are not known to the new owner. Consequently, a horse may be treated with an injection a week before it races, be claimed and transferred to a new owner, and the new veterinarian will have no way of knowing the horse's history, leaving open the possibility of the immediate injection of the same joint. The proposed addition of CHRB Rule 1660.1, Delivery of Medical Records, seeks to remedy this issue by requiring all existing medical records from a horse claimed in a claiming race to be transferred from the horse's former attending veterinarian(s) to the horse's new owner or designee within five (5) days of the claim.

ANALYSIS

Claiming Races are an important part of horse racing in California. In a claiming race, all horses participating are for sale and can be "claimed" or purchased prior to the beginning of the race. Claiming races account for 60% of all races run at California racetracks and represent a common practice in which horses are bought and sold among owners. When a horse is purchased in a claiming race, the medical history of the horse is rarely provided to the new owner. The lack of relevant medical records creates a risk for the health and safety of both horse and rider. Without access to the horse's medical history veterinarians and trainers may be impaired in accurately assessing the horse's soundness.

On February 21, 2018, the Executive Director of the California Horse Racing Board brought this matter before the California Veterinary Medical Board during its regularly scheduled meeting. After discussion, the California Veterinary Medical Board approved and endorsed the CHRB's proposal of requiring the transfer of all existing veterinary medical records for a horse claimed in a claiming race to the horse's new owner. The vote by the California Veterinary Medical Board was unanimous.

This proposed addition of Rule 1660.1, Delivery of Medical Records, would create an exception for veterinarians, as permitted under Business and Profession Code section 4857(a), to disclose medical records of horses claimed in a claiming race, without violating rules regarding confidentiality. Rule 1660.1 provides an additional safeguard for horses claimed in a claiming race by ensuring the horse's medical record are transferred to the new owner.

BACKGROUND

Business and Professions Code section 4857 prohibits veterinarians from releasing medical records relating to veterinarian services performed on an animal unless certain exceptions are met. One exception recognized under Business and Professions Code section 4857(a)(4) provides that the release of information is required in order to comply with "any federal, state, county or city law or regulation."

Business and Professions Code section 19440 provides that the California Horse Racing Board shall have all powers necessary and proper to enable it to carry out fully and effectually the purposes of the Horse Racing Law. Responsibilities of the Board include adopting rules and regulations for the protection of the public and the control of horse racing and pari-mutuel wagering. Business and Professions Code section 19562 states the Board may prescribe rules, regulations and conditions under which all horse races with wagering on their results shall be conducted in this State. Business and Professions Code section 19580 provides that authority is vested with the Board to adopt regulations to establish policies, guidelines and penalties related to equine medication in order to preserve and enhance the integrity of horse racing in the state.

RECOMMENDATION

This item is presented for Committee discussion and action.

CALIFORNIA HORSE RACING BOARD
TITLE 4. CALIFORNIA CODE OF REGULATIONS
ARTICLE 7. CLAIMING RACES
PROPOSED ADDITION OF
RULE 1660.1. DELIVERY OF MEDICAL RECORDS

Medication, Safety and Welfare Committee Meeting
April 18, 2018

1660.1. Delivery of Medical Records.

(a) Consistent with CVMB CCR 2032.3(b) a copy of all existing veterinary medical records for a horse claimed in a claiming race shall be transferred from the horse's former attending veterinarian(s) to the horse's new owner or their designee within five days of the claim.

(b) Veterinarians attending a horse for the first time after it is claimed shall review all medical records provided to the owner or their designee pursuant to subsection (a) prior to performing any intra-articular injections, any other intra-lesional musculoskeletal corticosteroid treatment, or extracorporeal shock wave therapy to the horse

(1) In case of a medical emergency or medical necessity, corticosteroid treatment may be initiated prior to review of the medical records after which the horse shall be placed on the Veterinarians List for a minimum of 14 days.

Authority: Sections 19440, 19562, and 19580, Business and Professions Code.

Reference: Sections 19440, 19562, and 19580, Business and Professions Code.

CALIFORNIA HORSE RACING BOARD

APRIL 18, 2018
COMMITTEE MEETING

There is no material for Item 6

CALIFORNIA HORSE RACING BOARD

APRIL 18, 2018
COMMITTEE MEETING

There is no material for Item 7